



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### **Usage guidelines**

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### **About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

UC-NRLF



B 3 763 049

PROPERTY  
OF  
UNITED STATES  
SENATE LIBRARY



THE LIBRARY  
OF  
THE UNIVERSITY  
OF CALIFORNIA  
DAVIS

X

X

X

XX

XX

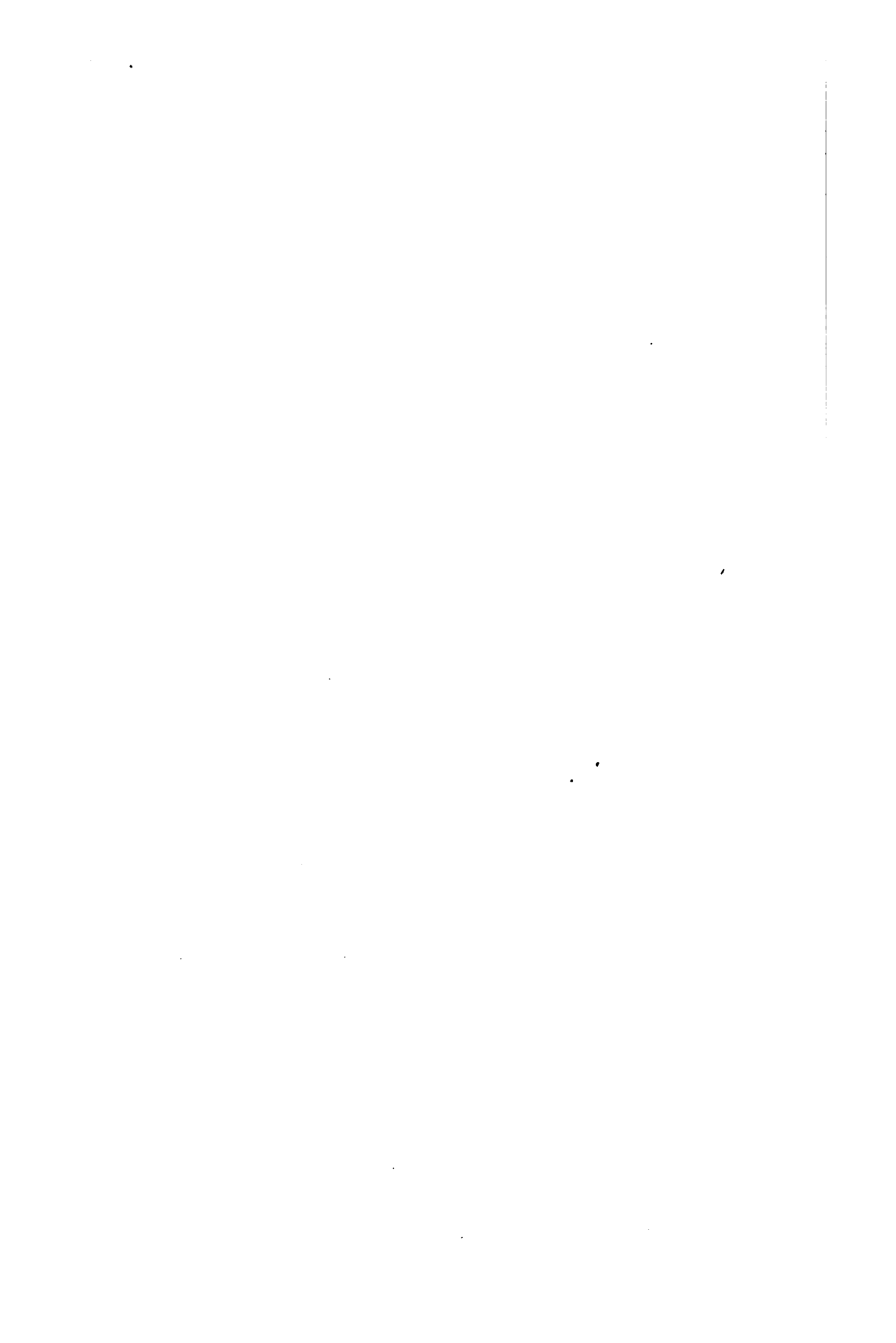
XX

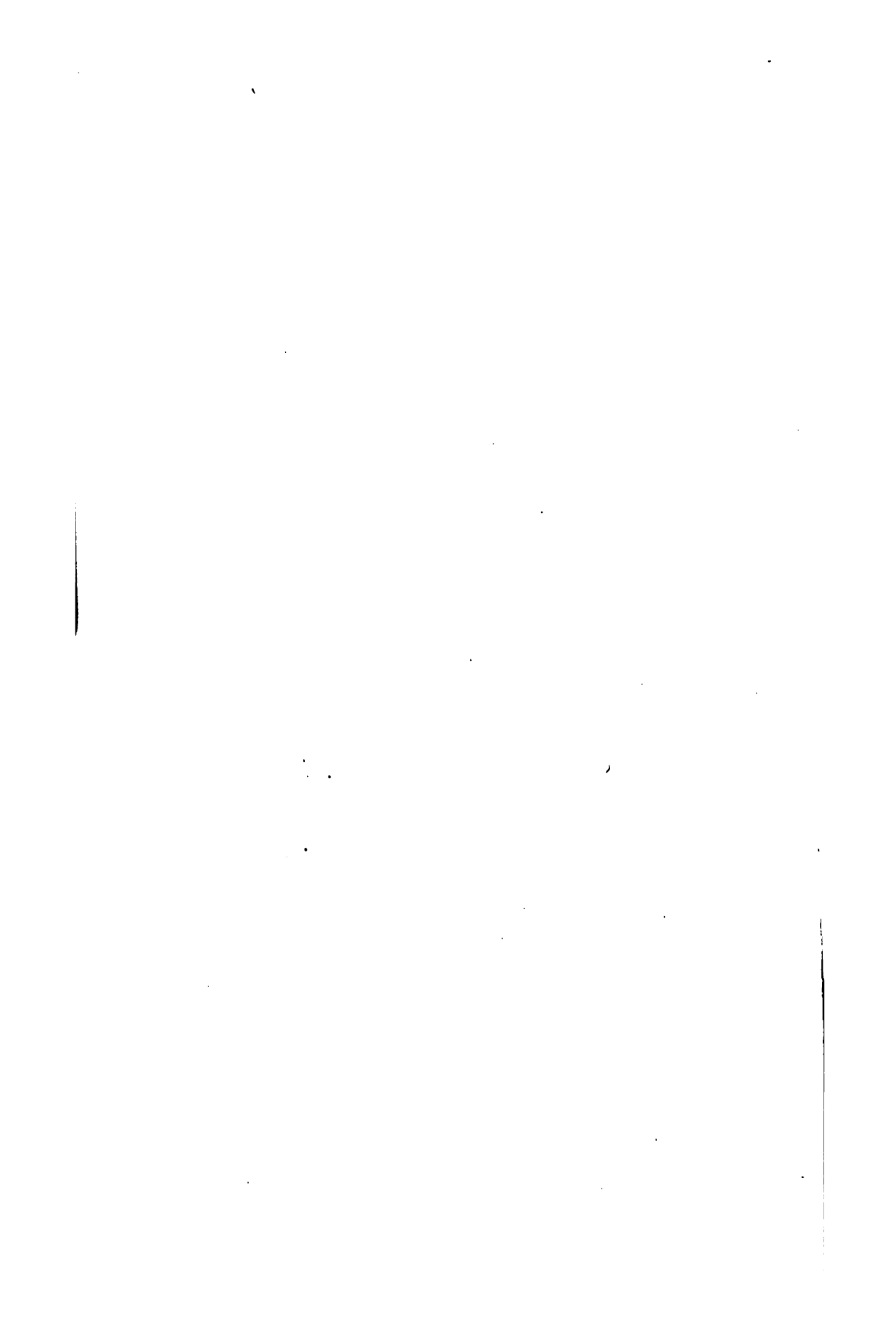
7892

XXXXXXXXXX









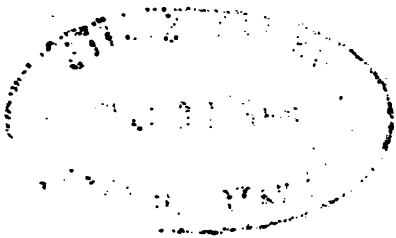
66<sup>TH</sup> CONGRESS : : : 3<sup>D</sup> SESSION

DECEMBER 6, 1920-MARCH 4, 1921

# HOUSE DOCUMENTS

VOL. 98

WASHINGTON : : GOVERNMENT PRINTING OFFICE : : 1920



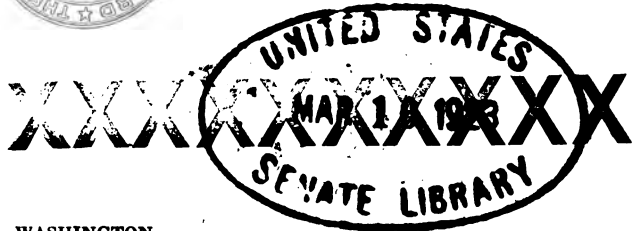
NEW YORK



FOURTH ANNUAL REPORT  
OF THE  
UNITED STATES  
SHIPPING BOARD



FISCAL YEAR ENDED  
JUNE 30  
1920



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1920

LIBRARY  
UNIVERSITY OF CALIFORNIA  
DAVIS

**THE UNITED STATES SHIPPING BOARD.**

---

**W. S. BENSON, *Chairman.***

**JOHN A. DONALD, *Commissioner.***

————— (vacancy), *Commissioner.*

————— (vacancy), *Commissioner.*

————— (vacancy), *Commissioner.*

————— (vacancy), *Commissioner.*

————— (vacancy), *Commissioner.*

**JOHN J. FLAHERTY, *Secretary.***

## TABLE OF CONTENTS.

### I. UNITED STATES SHIPPING BOARD.

	Page.
Letter of transmittal.....	9
Summary of activities.....	9
Purpose and policy.....	9
Construction activities.....	9
Repair activities.....	9
Operating activities.....	10
Merchant marine act, 1920.....	10
Organization of the Board.....	13
Functions of the Board.....	13
European organization.....	14
Investigation under section 12 of the shipping act of September 7, 1916.....	22
Report of Law Department.....	24
Problems in the conduct of litigation.....	26
Suits in admiralty, act of March 9, 1920.....	26
Ship-mortgage act.....	27
Codification of the navigation laws.....	28
Uniform commercial documents.....	29
Salvage services.....	30
Relations with the Army and Navy as to vessels used by those departments.....	30
German and Austrian vessels seized during the war.....	31
Transfer of ships to foreign registry.....	34
Recruiting Service.....	35
Insurance Division.....	40
Marine insurance.....	41
Statistical studies.....	47
Table I. United States merchant marine on June 30, 1919, and June 30, 1920—vessels of 500 gross tons and over.....	48
II. Recapitulation of ships owned by the United States Shipping Board as of June 30, 1919.....	48
III. Recapitulation of ships owned by the United States shipping Board as of June 30, 1920.....	49
IV. Comparison of steel vessels in berth liner service as of May 31, 1920, and June 30, 1920.....	50
Foreign trade.....	51
Total United States merchant marine and tonnage employed in foreign trade (chart).....	52
The development of trade routes.....	53
Establishment of foreign agencies.....	57
United States shipping in foreign trade (chart).....	60
Division of Regulation.....	61

	Page.
Port Facilities Commission.....	66
Division of Industrial Relations.....	68
Ship Sales Division.....	72
Legal problems involved in the sale of ships.....	73
 <b>II. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF CONSTRUCTION AND REPAIRS.</b>	
Activities and accomplishments.....	77
Growth of shipbuilding in the United States (chart).....	80
Yards and docks.....	82
Shipyard plants.....	82
Ships launched in the United States and Great Britain 1900 to 1919 (chart).....	90
Ship construction.....	91
Production during the fiscal year.....	92
Shipbuilding in United States since 1900.....	92
Active program by class.....	93
Active program by type.....	94
Keels laid, ships launched, and ships delivered (chart).....	96
Requisitioned ships.....	97
Wood ships.....	98
Accumulated program.....	100
Present active program.....	100
Ships built in Japan and China.....	100
Diesel engines.....	101
Passenger ships.....	101
Agency yards.....	103
Passenger transportation and housing.....	106
Total expenditures (chart).....	109
Authorizations and appropriations.....	110
Expenditures (chart).....	111
Organization.....	112
Transfer of divisions.....	113
Repair Department.....	114
Design and new construction.....	116
Inspection and acceptance.....	117
Repairs.....	119
Ex-enemy vessels.....	125
Remeasurement of vessels.....	131
Expenditures for repairs.....	132
Organization.....	133
 <b>III. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF OPERATIONS.</b>	
Introduction.....	137
United States shipping in foreign trade.....	137
United States merchant marine (chart).....	138
Traffic department.....	140
Vessels owned and controlled by the United States Shipping Board as of June 30, 1920.....	140

	Page.
Principal employment of United States Shipping Board tonnage (chart) ..	143
Cargo and passenger services .....	144
Rates .....	145
Claims .....	146
Allocation and assignment section .....	146
Tankers .....	149
Tugs and barges .....	149
Coastwise coal .....	150
Wood ships .....	150
Operating department .....	151
Vessel personnel .....	151
Bunkers .....	154
Radio section .....	156
Supervisors section .....	158
Supercargo section .....	161
Special service section .....	162
Contract bureau .....	163
Demurrage, off hire, and savings section .....	163
Charters .....	164
Inventory section .....	164
Reviewing section .....	164
General service section .....	165
Seamen's claim section .....	166
Financial operations .....	167
Organization .....	167

#### IV. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, MISCELLANEOUS SECTION.

Introduction .....	171
Division of Supply and Sales .....	171
Construction Claims Board .....	173
Legal Division, Emergency Fleet Corporation .....	178
Department of Investigation .....	179
Report of the General Comptroller .....	180
Report of the treasurer .....	183



## APPENDIX.

### I. UNITED STATES SHIPPING BOARD.

	Page.
TABLE I. (a) Names and compensation of employees of the United States Shipping Board in service for some period within the year ending June 30, 1920, who have resigned prior to that date.....	188
(b) Names and compensation of employees of the United States Shipping Board in service on June 30, 1920.....	190
II. Laws from 1914 to date affecting the Shipping Board.....	193
III. (a) Statement of accidents and estimated amounts and losses from July 1 to December 1, 1919.....	196
(b) Statement of accidents and estimated amounts and losses from January 1 to June 30, 1920.....	197

### II. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF CONSTRUCTION AND REPAIRS.

TABLE I. Shipyards now building for the Corporation.....	199
II. Shipyards disposed of or transferred to Supply and Sales Division .....	200
III. Marine railway and dry-dock contracts.....	201
IV. Keels laid by months, from beginning of program.....	204
V. Ships launched, by months, from beginning of program....	208
VI. Ships delivered, by months, from beginning of program.....	210
VII. Ships delivered, by districts.....	211
VIII. Ships delivered, by States.....	212
IX. Active program, by type of ship.....	216
X. Active program, by class of construction.....	216
XI. Accumulated program of ship construction (including construction in foreign yards).....	217
XII. Accumulated program of ship construction, by geographical sections of the United States.....	218
XIII. Estimated deliveries, by months, to complete the program..	219
XIV. Shipyards which have completed contracts.....	220
XV. Cancellations of ship contracts, by type of ship and districts .....	222
XVI. Cancellations of ship contracts, by States.....	224
XVII. Passenger ships, status of contracts.....	227
XVIII. Dormitories and cafeterias constructed or planned for the Corporation .....	228
XIX. Schedule of housing projects and type of housing.....	228
XX. Loans made to public utility companies.....	229
XXI. Municipalities which have furnished facilities for housing..	230

	Page.
TABLE XXII. Total commitments, housing program.....	230
XXIII. Details of housing expenditures.....	231
XXIV. Security held by the corporation for expenditures on account of passenger transportation.....	235
XXV. Contracts for transportation facilities.....	237
XXVI. Data on ex-enemy vessels.....	239

### III. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF OPERATIONS.

TABLE I. Vessels entering and clearing United States ports with cargo, January 1, 1920, to June 30, 1920.....	250
II. United States Shipping Board steel cargo vessels employed in foreign trade.....	252
III. Employment of United States Shipping Board tonnage, March, 1919, to June 30, 1920.....	253
IV. Direct service lines to South and Central America.....	254
V. Vessels operating in trades which do not have United States ports as terminals.....	256
VI. Assignment of United States Shipping Board tonnage.....	257

### IV. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, MISCELLANEOUS SECTION.

EXHIBIT A. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Consolidated balance sheet," as at June 30, 1920.....	260
B. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement to show outcome of all transactions, by classes of activities, from inception to June 30, 1920," as at June 30, 1920.....	261
Schedule 1. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of general cash and cash funds," as at June 30, 1920.....	264
2. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of accounts receivable," as at June 30, 1920.....	264
3. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of investments," as at June 30, 1920.....	265
4. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of materials, supplies, ship stores, etc.," as at June 30, 1920.....	265
5. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of purchase, construction, and reconditioning expenditures on owned vessels," as at June 30, 1920.....	266
6. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of plants, property, and equipment, fuel-oil stations, real estate and buildings, furniture and fixtures, mechanical office equipment, automobiles, launches, etc.," as at June 30, 1920.....	266

## EXHIBIT B—Continued.

	Page.
Schedule 7. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of construction of improvements to, etc., expenditures of housing projects and transportation facilities," as at June 30, 1920.....	266
8. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of appropriations, allotments, and unexpended balances thereon, less transfers therefrom, to show net amount received from appropriations and allotments," as at June 30, 1920.....	267
9. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of reserves," as at June 30, 1920.....	267
EXHIBIT C. Statement of receipts and withdrawals from appropriation and allotment accounts in the United States Treasury for fiscal year ended June 30, 1920.....	269
D. Cash receipts and disbursements for the fiscal year ended June 30, 1920.....	270
Schedule 10. Disbursing officer, miscellaneous receipts, July 1, 1919, to June 30, 1920.....	272
11. Division of Construction, miscellaneous cash receipts, July 1, 1919, to June 30, 1920.....	272
12. Division of Operations, summary of cash receipts, July 1, 1919, to June 30, 1920.....	272
13. Disbursing officer, miscellaneous disbursements, July 1, 1919, to June 30, 1920.....	273
14. Division of Construction, miscellaneous cash disbursements, July 1, 1919, to June 30, 1920.....	273
15. Division of Operations, summary of cash disbursements, July 1, 1919, to June 30, 1920.....	273

## LETTER OF TRANSMITTAL.

WASHINGTON, D. C., *December 1, 1920.*

TO THE CONGRESS:

We have the honor to submit the Fourth Annual Report of the United States Shipping Board, covering the fiscal year ended on June 30, 1920. The report embraces accounts of the various activities of the Board and the Emergency Fleet Corporation under the provisions of the shipping act of 1916, as well as under subsequent acts.

### SUMMARY OF ACTIVITIES.

Many problems have been presented to the Shipping Board for solution which have necessitated reorganization and readjustment of established policies.

#### **Purpose and Policy.**

The purpose of the Board is to establish a permanent American merchant marine ultimately resting on private enterprise and private capital. If it is the desire of the American people to maintain their present high standards of living and to retain even approximately their present position in finance and trade, our annual surplus must be sold in foreign markets; and in order to do this it is necessary to have a merchant marine owned and controlled by American citizens.

#### **Construction Activities.**

In the construction field there was a tremendous reduction of activities to a normal or peace-time basis, which has diminished the volume of expenditures with no impairment of efficiency. Although there was a sharp curtailment of the building program, the remarkable production records of the first half of the year 1919 were unsurpassed. During September, 1919, the Division of Construction delivered 150 ships of over 3,000 dead-weight tons, which represented a total of 810,386 tons. If we consider the ocean-going vessels, the output for the month of September, 1919, has greatly exceeded pre-war deliveries for an entire year.

On June 30, 1920, production was 93.3 per cent complete. The net program as of that date contemplates 2,315 ships of 13,675,711 dead-weight tons.

#### **Repair Activities.**

While the activities of the Construction Division have decreased during the year due to cancellations, and the progress toward the

completion of the program, the work of the repair department has expanded because of the increase in the size of the fleet in operation and the transfer from the War and Navy Departments of the ex-enemy vessels.

**Operating Activities.**

There have been many accomplishments in the field of ship operating during the fiscal year. The records of the Construction Division in furnishing new tonnage, the release of tonnage in the war services, and the European Food Relief Service has brought under the control of the Division of Operations 1,502 vessels of 9,367,551 dead-weight tons. These vessels have been assigned or allocated to over 300 owners or ship-operating companies.

A study of the world exports and imports has resulted in our merchant marine being placed on 50 foreign trade routes. On June 30, 1920, there had been established 209 general cargo berths, of which 202 are between the United States and foreign ports and between United States ports, and 7 between foreign ports. These various berths afford the shipper 229 services. Many of them are making voyages to ports of the world where ships under the American flag were seldom seen before. Through the establishment of foreign agencies, the American merchant marine has become independent of alien foreign agents. The vessel flying the American flag is given primary consideration. In addition to the establishment of direct agencies, encouragement has been given to American firms who upon their own initiative and capital have opened offices abroad. It is hoped that American vessels will have preferential treatment in foreign ports in securing cargoes, economical administration in the matter of port changes, and expeditious dispatch.

**Merchant Marine Act, 1920.**

By the merchant marine act, 1920, the membership of the Board has been increased to seven members. Additional duties and greater powers have been conferred upon the new Board. The complete analysis of the act and the policies to be determined thereunder are now receiving the careful attention of the Board.

The report as herewith submitted covers the United States Shipping Board and subsidiary organization for the fiscal year June 30, 1920. The Board has not been reorganized under the provisions of the merchant marine act, and no events occurring after June 30, 1920, have been taken into account.

W. S. BENSON,  
*Chairman.*  
JOHN A. DONALD,  
*Commissioner.*



---

---

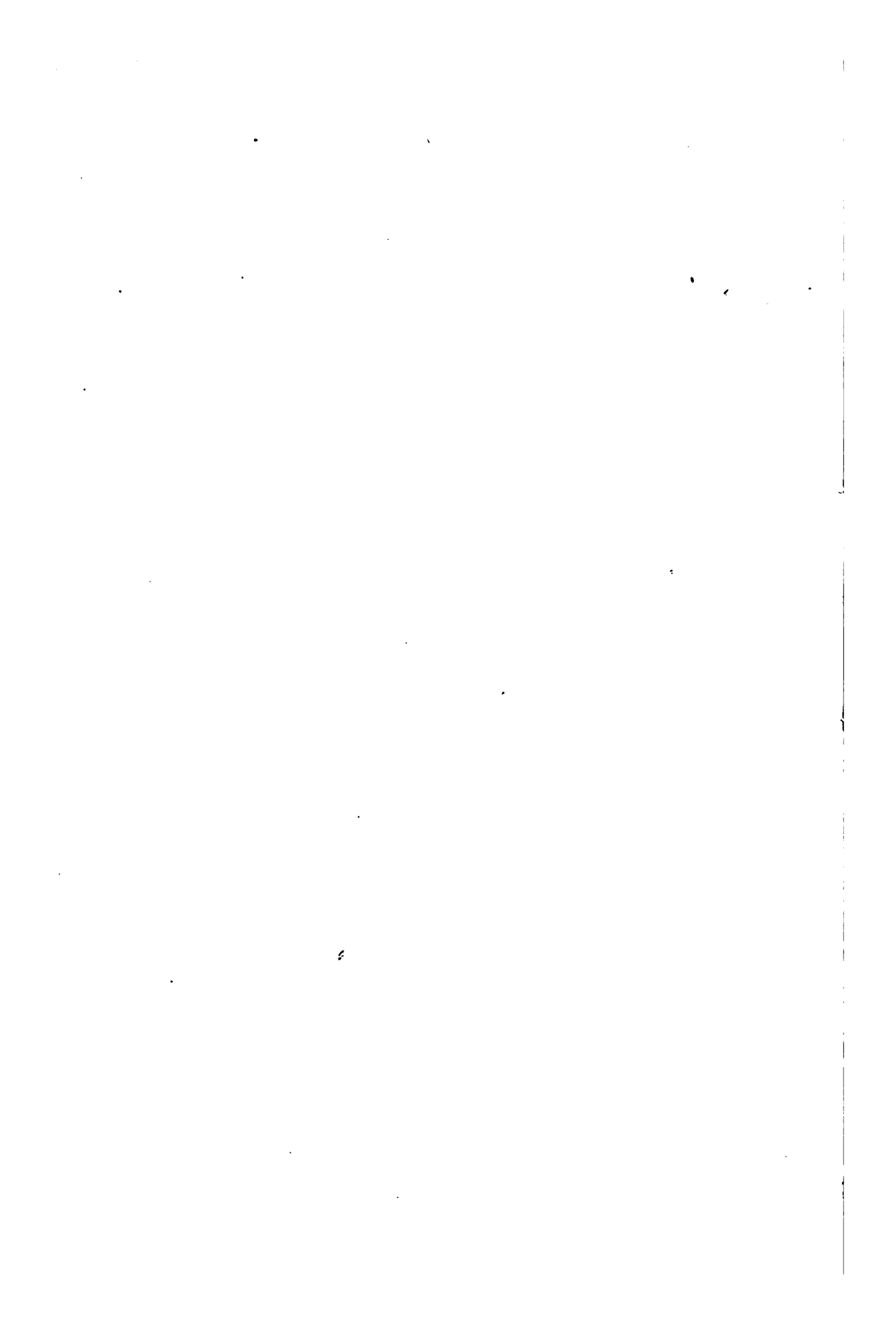
UNITED STATES SHIPPING BOARD

---

PART I

---

---



## I. UNITED STATES SHIPPING BOARD.

---

### ORGANIZATION.

The members of the Board on June 30, 1919, were Edward N. Hurley (chairman), Raymond B. Stevens, John A. Donald, and Henry M. Robinson. During the fiscal year ending June 30, 1920, two chairmen and three commissioners resigned: Edward N. Hurley (July 31, 1919), Henry M. Robinson (Sept. 15, 1919), Raymond B. Stevens (June 15, 1920). John Barton Payne (chairman) was appointed August 5, 1919, vice Edward N. Hurley. T. A. Scott was appointed August 5, 1919, vice Bainbridge Colby, resigned March 4, 1919. John Barton Payne resigned March 13, 1920. W. S. Benson (chairman) was appointed March 13, 1920. T. A. Scott resigned April 5, 1920. (No successor appointed.)

On June 30, 1920, the Board consisted of W. S. Benson (chairman) and John A. Donald.

Section 3 of the merchant marine act of June 5, 1920, amends section 3 of the shipping act, 1916, and provides that the Board shall be composed of seven commissioners, to be appointed by the President, with the advice and consent of the Senate, the President designating the member to act as Chairman of the Board. Under the provisions of this act an entirely new Board is to be appointed, but the members of the original Board in office at the date of the passage of the merchant marine act are to remain in office until all the members of the enlarged Board are appointed and qualify.

### FUNCTIONS.

The United States Shipping Board is the agency created by Congress for the fundamental purpose of providing a merchant marine of the best equipped and most suitable types of vessels to carry the commerce of the country and to serve as a naval or military auxiliary in time of war or national emergency. The general purposes and functions of the Board have been defined by the shipping act, 1916; the act of July 15, 1918; and the merchant marine act, 1920.

The broad powers conferred upon the Board make its duties numerous and complicated. It regulates all the shipping of the coun-

try; recruits and trains officers and seamen for the merchant fleet; supervises the charter and transfer of vessels to aliens; establishes trade routes and foreign agencies; develops port facilities; handles large labor problems; and operates, directly or through private shipping agencies, a vast merchant marine. All matters of policy regarding ship sales, cancellations, etc., are determined by the Board.

The construction and repair of vessels is performed by the Division of Construction and Repairs of the United States Shipping Board Emergency Fleet Corporation. The task of operating the merchant fleet is handled through the Division of Operations. The functions and accomplishments of these two divisions are clearly defined in other sections of this report.

#### EUROPEAN ORGANIZATION.

The European organization of the Shipping Board had its beginning in June, 1919. In that month the special commissioner for Europe assumed the duties of that office. Headquarters were established at 8 Grosvenor Gardens, London, and the initial steps were taken toward the development of an organization adequate to cope with the formidable problems ahead of it. By June 30, 1920, representatives had been located in all of the more important seaports of the United Kingdom and continental Europe.

Prior to the establishment of the European organization, Shipping Board vessels in European ports had been attended entirely by the agents of the managing companies. Some of these agents were diligent in the interests of their principals; others, however, either through inefficiency, indifference, or dishonesty, allowed American ships to be mishandled and subjected to delays and exorbitant charges. The disorganization and congested condition of European ports made this sort of thing all the more possible. The new Shipping Board organization, through its control over movements, charters, cargoes, bunkers, supplies, repairs, etc., has succeeded in reducing the average turn around in port of Shipping Board vessels loading and/or discharging cargo from 25.4 days for the United Kingdom and 19 days for the Continent in September, 1919, when the first reliable statistics were obtained, to 19.2 days for the United Kingdom and 11.3 days for the Continent in May, 1920. The cost of bunkers, supplies, and repairs has also been materially reduced.

In ports where there have been no Shipping Board representatives, as well as ports where such representatives have been located, very valuable assistance has been given by officials of the American Diplomatic and Consular Service. This spirit of cooperation has greatly contributed to the progress which the European organization of the Shipping Board has made in solving the problems confronting it.

In the developments of the European staff, organization followed the lines which seemed best adapted to meet prevailing conditions and problems. The arrangement of departments and sections during the year under review do not, therefore, exactly correspond to those at Washington. At the end of the fiscal year, however, a complete reorganization is about to take place with a view to making the European branch as nearly like the home office as is practicable under the circumstances. The principal departments, their organizations, and functions, together with the main problems confronting each, are briefly outlined below.

#### **Operating Department.**

The operating department exercises supervision over Shipping Board vessels in Europe with respect to navigation, pilotage, handling of cargo, bunkers, ballast, personnel, and salvage work.

Branch offices are maintained at the following places: In the United Kingdom, London, Liverpool, Manchester, Cardiff (for the whole of the Bristol Channel), Fowey, Hull, Newcastle; on the Continent, Helsingfors, Stockholm, Gothenburg, Copenhagen, Danzig, Hamburg, Rotterdam, Antwerp, Paris, Dunkirk, Le Havre, Brest, St. Nazaire, La Rochelle, Bordeaux, Gibraltar, Barcelona, Marseille, Naples, Piræus, Constantinople, Port Said. Other ports are covered by traveling representatives. On June 30, 1920, the department had under its supervision in the United Kingdom ports 140 vessels, in continental ports 77, in European waters 114, a total of 331 vessels.

In all respects the operating department undertakes to work in cooperation with the managing agents, their European representatives, and the ships' masters. It aims to get in touch with the vessels as soon as they come within its jurisdiction and render all assistance possible. Many masters are strangers to European waters, and have little knowledge of local laws and shipping conditions. By furnishing them with the latest aids to navigation, mine warning, charts, etc., the department is able to greatly expedite the ships' movements. Local agents have in many cases been chosen unwisely, or may for other reasons fail to execute satisfactorily the business intrusted to them. Under these circumstances, the presence of Shipping Board representatives in the ports, to see that berths are taken promptly, cargoes handled expeditiously, bunkers and ballast provided in proper quantities and at reasonable costs, means great saving of time and money. Furthermore, it has been possible for the department, by keeping in close touch with conditions at the several ports, to suggest the diversion of vessels from the more congested ports to those where discharging conditions are easier and dispatch quicker.

One of the great problems of the past year has been that of fuel. Bunker coals have been scarce at certain ports, and local agents

have in some instances despaired of procuring them. The operating department, however, from its more intimate knowledge of conditions, has been able to locate available supplies and avoid hardship of this account. The fuel-oil supply has constituted a somewhat more serious problem. At a time when oil was almost unavailable from commercial sources the London office was able to make an arrangement with the British Admiralty whereby absolutely necessary supplies were procured at Gibraltar for Mediterranean vessels and in the United Kingdom for continental vessels. This arrangement could only be maintained temporarily, however, and the Shipping Board was again thrown on its own resources. To meet the situation, supplies available through commercial channels have been augmented by opening up relations with new firms and inducing old ones to extend their facilities; special storage for Shipping Board oil has been arranged at Brest; good relations have been established with the depot at Lisbon; American tankers carrying American oil have been held at Gibraltar for bunkering Shipping Board steamers direct. By these methods the requirements of Shipping Board vessels have been covered with relatively little delay in a minimum number of diversions. The situation is very acute, however, and, while some relief will doubtless come from the establishment of additional stations at Bizerta, Messina, and Savona, the problem as a whole is not likely to be solved in the near future. It is a wise policy, therefore, to give ships bound eastward from the United States the maximum amount of fuel oil, so as to make their demands on European supplies as light as possible.

The operating department during the period under review has been able to save large sums of money by taking prompt action in cases of stranding or other mishaps and supervising salvage operations. In some instance stranded vessel have been refloated by Shipping Board officials without any outside assistance. Whenever a casualty of one sort or another occurs, the department makes an immediate and thorough investigation with technical experts in an effort to determine the cause and place of responsibility.

The discipline of crews on ship and on shore has been far from exemplary, and American shipping has received many black marks in foreign ports on this account. The operating department has made it a policy to promptly investigate such matters and to take immediate and drastic action, as regards not only the misconduct of the men but also any negligence or incompetency on the part of the officers and masters. Supplying crews to replace those repatriated has been one of the smaller but none the less trying problems encountered. The expiration of articles while the vessels were in European waters, necessitating the replacement of the whole or a large portion of the crew, has been a never-failing source of difficulty.

**Traffic Department.**

The traffic department handles all traffic matters, including chartering, demurrage, and cargo claims, in connection with Shipping Board vessels operating in European waters. The manager of the department formerly had his offices in America, but the obvious advantages of being located in London, which has for so long been the hub of the world's shipping activities and the focus of the world's shipping information, led to his transference to that city. For working purposes the department is divided into three sections: (1) Baltic and Continental traffic, (2) United Kingdom and Mediterranean traffic, (3) demurrage and cargo claims. The general policy has been one of cooperation with managing agents and their European representatives in any way that would lead to better business for American ships.

The traffic department aims to keep in close touch with cargo developments everywhere and by prompt advice to enable managing agents, singly or in groups, to take advantage of the concerted action made possible by such a central bureau of traffic information, to the end that freighting contracts may be made in advance and rates stabilized. Aside from the matter of getting current business on advantageous terms for American ships, the department has succeeded in effecting a number of important alterations in the standard charter parties governing the Mediterranean ore, English china clay, German potash, and Baltic lumber trades. From the better conditions governing dispatch, demurrage, etc., which these changes have brought about, the entire shipping fraternity has benefited.

**Construction and Repair Department.**

The Construction and Repair Department supervises all alterations and repairs on Shipping Board vessels in European ports with respect both to the nature of the work done and the contractors employed. Representatives of this department are now located in the following ports: In the United Kingdom, London, Falmouth, Liverpool, Manchester, Newcastle, Hull, Cardiff, Glasgow, Dublin; on the Continent, Dunkirk, Le Havre, Brest, St. Nazaire, Bordeaux, Marseille, Antwerp, Rotterdam, Barcelona, Gibraltar, Lisbon, Genoa, Naples, Hamburg, Danzig, Copenhagen, Stockholm, Gothenburg. At Falmouth a stock of machinery spares, and ships' equipment is maintained. The Shipping Board tug *Goliath* is held in readiness to assist disabled ships into port.

The representatives of this department carefully scrutinize the repair lists prepared by the ships' officers and eliminate all work which is not required for efficiency or seaworthiness. In connection with the work which must be done, requisitions are issued to respon-

sible contractors who offer the most favorable terms in the several districts. Duplicate requisitions are furnished to representatives of the comptroller's department in order to assist them in checking all disbursements concurrently with the supervision and execution of the work, and to facilitate the certification of repair bills.

Every effort is made to avoid delays in the dispatch of steamers on account of repairs. Whenever such delay appears likely to the district representatives of the Construction and Repair Department, a full statement of the circumstances is cabled to the London office, where the situation is carefully considered and steps taken to hasten the completion of repairs by transferring spare parts from other vessels or adopting alternative methods of repair. When extensive repairs are necessary, the question of transferring vessels to other ports which are better equipped for the economical and expeditious performance of the work is investigated by the director of the department prior to placing a requisition for such repairs.

During the year ended June 30, 1920, repairs to about 4,000 steamers (some being the same ships on different voyages) have been placed, supervised, and executed by the representatives of the Construction and Repair Department in Europe. Only in a few instances have vessels' sailing been postponed on account of repairs, and these delays were generally attributable to difficulty in getting suitable material for the work on American machinery. As a result of the elimination of irregular commissions, cancellations of unnecessary work, transportation of vessels to more economical ports, and the execution of repairs on a low-tariff basis, a saving of \$1,320,000 has been made during the year under review.

Reports showing the steaming results of all vessels which have completed their eastward voyages to European ports, and advising as to the competency and conduct of the engine-room force, are prepared by representatives of the Construction and Repair Department in the several ports and forwarded to the London office; thence they are sent to Washington. Ships' engineers who show diligence and competency in the discharge of their duties are given credit for their good work and thus encouraged to further efforts in this direction. Cases where engineers have apparently been negligent or inefficient are thoroughly investigated and reports sent to the Director of Construction and Repairs at Washington.

#### **Supply Department.**

The supply department was inaugurated in the autumn of 1919. During the first few months of the operation of the European organization no control was exercised over the purchase of supplies. These matters were left entirely to the ships' officers and the local agents. Abundant evidence that this system was lending itself



to extravagance and graft very soon brought about the conclusion that some form of control was highly desirable. Accordingly, in October, 1919, Liverpool was chosen as an experimental port and a temporary supply system was set up there. Within 30 days this undertaking so clearly justified itself by eliminating the purchase of unnecessary supplies and effecting a lower price on those actually bought that steps were at once taken to extend the scheme to other ports. By June 30, 1920, additional supply systems had been installed at practically all important United Kingdom and continental ports. Furthermore, the system is being extended to cover all purchases on behalf of Shipping Board vessels, including supplies, bunkers, ballast, and repair parts.

Before any supplies are purchased at a given port the managing agents and port agents are notified. Purveyors are also notified, their quotations are solicited, and a form is supplied for listing the items. When all tenders are in prices are carefully compared. Purveyors whose prices are found to be reasonable are given a portion of the business for a period of one week. This plan arouses competition among the different dealers, and has achieved excellent results in the direction of lower prices and prompter deliveries.

When a ship needs supplies masters are required to submit requisitions for the several items. Requisitions for deck and stewards' supplies are passed on to the port representative or marine superintendents for approval before the purchases are allowed. Representatives of the Construction and Repair Department approve all requisitions for engine-room supplies. The ships' personnel are required to check and weigh all items received aboard and to return a certified invoice to the Shipping Board office. Prices listed on this invoice are carefully compared with the tenders. The invoices, with any discrepancies noted on them, are forwarded to the comptroller's office to be audited and sent to the agents for payment. As a general rule bills are now paid within 10 days after the supplies are delivered, which is a great improvement over conditions formerly existing. Among other things, it gives the ships the advantage of discount rates, which range from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  per cent.

To illustrate the economies effected by the supply system, the record of Liverpool may be cited. From October 27, 1919, to the following March 1, the purchases made through this office amounted to approximately £127,000. During this time, requisitions were disallowed amounting to £4,470 in the case of supplies and £3,071 in the case of ballast. At the same time £12,578 were taken from the fuel requisitions. The total direct saving thus effected at the port was £20,119, or, at the prevailing rate of exchange, well over \$100,000. Moreover, savings have been effected by the competitive system in getting quotations below market prices, amounting in the

case of paint to about 30 per cent, laundry 45 per cent, meat 13 per cent, groceries 10 per cent, fish 15 per cent, packing 23 per cent, rope 25 per cent, other deck and engine stores 10 to 35 per cent. It is these results which have led the dependable agents in European ports to accept the Shipping Board supply system as a useful institution.

#### **Legal Department.**

The legal department divides its work into four main divisions: (1) Collision and salvage, (2) general average, (3) commercial law, (4) protection and indemnity insurance. As regards collision and salvage cases arising in the United Kingdom, the department undertakes to procure full information in each case, working through other departments of the Shipping Board or through a prominent firm of Admiralty solicitors, which has reputable correspondents in most of the ports. On the basis of the information thus procured the department recommends that claims be settled directly or that litigation be resorted to. Cases arising outside the United Kingdom are dealt with in the first instance by the Shipping Board representatives in those territories, acting in conjunction with firms of Admiralty lawyers selected by the legal department. The London office deals with these cases directly only when they are referred to it by the representatives in the outlying districts.

General average cases are handled by the legal department in a purely supervisory capacity, the object being to make sure that the necessary steps have been taken by the European agents of the vessels to have an average bond signed. As regards protection and indemnity insurance, cargo claims for \$500 or more are dealt with directly by the American Steamship Owners' Mutual Protective and Indemnity Association, as are also claims for damage to docks, jetties, and piers amounting to more than \$50. Cargo claims under \$500 are handled through British agents for the above-mentioned association, and claims for damage to docks, jetties, and piers under \$50 are dealt with directly by the legal department in cooperation with the repair department.

All legal matters are under the direct supervision of the special commissioner, thus insuring uniformity of policy. The legal department endeavors to keep in close touch with the Law Department at Washington in all matters of litigation, being guided by its recommendations and instructions.

#### **Intelligence Department.**

The intelligence department endeavors to keep the Shipping Board, and the American shipping community in general, informed on significant shipping, shipbuilding, trade, and industrial developments in Europe. This work has been carried forward through the preparation and circulation of: (1) A weekly digest of the press,

embracing from 50 to 75 items of particular economic importance; (2) monthly reviews on the foregoing subjects, presenting the results of independent research and conferences with well-informed persons; (3) monthly summaries showing the volume of Shipping Board tonnage entering and clearing European ports and the relative rapidity of dispatch in the ports; (4) special reports on particular phases of the shipping or trade situation, such as may from time to time be thrown into prominence. In addition to Shipping Board officials, the above reports and digests are circulated to about 100 leading shipping and commercial houses in the United States.

**Communications Department.**

The communications department (1) handles directly all communications to and from the London office whether by cable, land wire, or radio, and (2) supervises radio personnel, radio repairs and supplies, submarine signaling apparatus, and the installation of telephones in Shipping Board offices in the United Kingdom. The department gathers the latest information regarding shore stations in Europe for the use of radio operators, and keeps Washington fully advised regarding changes in radio work in Europe, erection of new stations, development of new facilities, etc.

**Secretarial Department.**

The secretarial department embraces a number of sections which severally receive, record, route, distribute, and file all incoming mail and cables, record and post all outgoing correspondence, prepare and distribute reference files on different subjects and different ships, maintain a store of office supplies for the entire European organization, reproduce documents by mimeograph or photostat, supervise janitorial and messenger services at the London office, provide stenographic and typing assistance to meet the special needs of the various departments. The average number of pieces of correspondence handled by this department in June, 1920, was 721 per day; the average number of subject and ship files supplied to other departments on request was about 210 per day.

**Comptroller's Department.**

The European comptroller's department was established in October, 1919. Its activities have developed furthest in connection with the audit of repairs, embracing the audit of all accounts for repairs in the various ports and the audit of spare parts accounts at the various Shipping Board stores. The auditors at the ports undertake, in so far as the contractors will allow, to check time and material from the contractors' books and certify as to the correctness of the same. They are assisted by a staff of recorders who are present on the ship or at the plant while the work is being carried out. The great problem is to get the contractors to render fair bills. Many con-

tractors can be relied upon in this respect, but others are inclined to make excessive charges. This practice has been greatly reduced by the operations of the comptroller's department, for the contractors now know that their bills will be closely scrutinized. Reduction in bills rendered by different contractors has been effected ranging from 10 to 50 per cent. The delay formerly experienced in getting bills passed up for payment caused dissatisfaction among the contractors and did not tend to induce low quotations. This cause of complaint is being eliminated by the comptroller's organization.

Between October, 1919, and June 30, 1920, repair accounts were audited and passed on to the disbursing officer for payment up to the following amounts:

Pounds sterling	339, 455
Francs	2, 587, 312
Guilders	222, 486
Marks	8, 206, 830
Kroners	621, 761
Pesetas	60, 718
Escudos	10, 000

The general audit machinery, as distinguished from repair audit, has not reached the same stage of development. The plan is to establish a system of control for all expenditures on behalf of Shipping Board vessels in Europe. An exhaustive method of checking and auditing bills has already been established in many of the principal European ports and will be extended to others as quickly as possible. The general audit section has also assisted in the adjustment of the interchange of tonnage between Great Britain and the United States.

#### Disbursing Department.

The disbursing department pays all salaries and other expenses for the European organization. At the present time these expenses amount to nearly \$1,000,000 per month, of which about 75 per cent represents payment for repairs on Shipping Board vessels. The department has encountered trying problems in connection with exchange transactions due to the rapid and wide fluctuations of the exchange rates in different European countries. The European branches of American banks have been of great assistance in this connection, but such facilities need to be further extended if they are to meet fully the requirements of the Shipping Board.

#### INVESTIGATION UNDER SECTION 12 OF THE SHIPPING ACT OF SEPTEMBER 7, 1916.

In accordance with the requirements of section 12 of the shipping act of September 17, 1916 (as set forth in the third annual report), special committees were constituted to carry on the investigations out-

lined by this section and to make recommendations to the Board based on the result of their investigations.

I. A committee, which was known as the committee on classification and rating of vessels, made a very detailed report, which the Board, by resolution, adopted on September 23, 1919. This report contains final and specific recommendations on the subject. Specific recommendations as outlined by the Board are as follows:

1. That for all merchant vessels built or operated under the laws of the United States *all technical questions concerning matters of construction*, in so far as such matters are regulated by statutes, shall be submitted to the American Bureau of Shipping, as the principal adviser to the executive branch of the Government, under which supervision of such matters may rest.

2. That Congress name the American Bureau of Shipping to be the regular *constituted authority for fixing load lines and freeboard*.

3. That a *joint commission* with representatives from the proper Government authorities and the American Bureau of Shipping be established as the *principal advisory authority* to deal with all matters relating to the safe construction of ships and their machinery.

4. That steps be taken by Congress to have the *differences between* the requirements of the Steamboat Inspection Service and those of the recognized classification societies adjusted by this joint commission at the earliest practical time, and their findings be presented to Congress.

5. The committee, appreciating the desirability of an *agreement* between classification societies as to the *physical* properties of metals used in the construction of vessels within the United States, recommend that the Shipping Board write to Committee No. 3, American Society for Testing Materials, requesting that committee (which was appointed for the purpose of obtaining such an agreement) to report its findings to the Board at the earliest practicable moment.

6. *Fees*.—While the fees charged by the various registers or classification societies are approximately on the same basis, it appears that the method can be improved upon, and it is suggested that the management of the registers or classification societies be conferred with, with a view to securing an *improvement in the method of charging fees*.

With a view to improving the service of the American Bureau of Shipping, the following additional recommendations were made:

1. That it be recommended to the American Bureau of Shipping that it elect a qualified standing committee to pass upon all technical questions involving proposed changes in construction or new designs.

2. It is recommended, where a surveyor has once qualified as a *surveyor* for the American Bureau of Shipping, *that the position be held during the life and good behavior* of the surveyor, but that said surveyor should remain in exclusive employ of the American Bureau of Shipping, and that a proper plan for pensions should be devised and made operative.

3. That the rules for continuation of class be so amended as to lead to a more prompt detection of the defects due to wear and tear.

4. It is recommended that where temporary repairs or partial permanent repairs only are effected the American bureau's surveyor of the port to which the vessel is proceeding be promptly furnished with full particulars as to what remains to be done by letter or cable.

These recommendations were considered in drafting the merchant marine act, 1920.

II. The subject of marine insurance has been given careful study under the supervision of the Board. A report on the status of marine insurance in the United States has been prepared and submitted to the Committee on Merchant Marine and Fisheries of the House of Representatives. (See "Report on Status of Marine Insurance," by S. S. Huebner. Government Printing Office, 1920.) The results of this investigation and the specific recommendations are embodied in this report under the subject of "Marine insurance."

III. The navigation laws of the United States and the rules and regulations thereof are studied by a special committee, which is known as the navigation laws revision committee. A report was rendered by this committee on April 16, 1920. The work of redrafting the navigation laws in accordance with recommendations of the committee is now in progress. The Board is also undertaking the codification of the navigation laws, and in this task it will have the cooperation of the navigation laws revision committee. A complete report on the codification of the navigation laws is to be found in another section of this report.

IV. Recommendations as a result of the investigation of the subject of mortgage loans on vessel property were embodied in the ship-mortgage act, 1920, which was enacted by Congress as section 30 of the merchant marine act, 1920. An interpretation of this act is presented in the section of this report dealing with the "ship-mortgage act."

#### REPORT OF LAW DEPARTMENT.

The Law Department advises the Board and its various divisions on legal questions. It handles the current legal work arising from the various activities of the Board and the various divisions of the United States Shipping Board Emergency Fleet Corporation.

##### **Common Law Division.**

The common law division of the Law Department advises on general administrative problems, proposed legislation, and relations with Congress, sales, and transfer of vessels and nonmaritime claims and contracts.

Among the important matters with which the common law division has been concerned in the past year are the following: Proposed legislation, including the merchant marine act and the congressional investigation of the operations of the Shipping Board and United States Shipping Board Emergency Fleet Corporation; the determination of just compensation for vessels the title to which was requisitioned by the Shipping Board; the determination of just

compensation for vessels requisitioned while under construction, including important settlements with Norwegian, Danish, and other neutrals whose vessels were requisitioned; negotiations with the Railroad Administration in connection with coastwise vessels taken over by that organization; the sale of vessels, including the drawing of ship-purchase and ship-mortgage forms; transfer of vessels to foreign registry and to aliens; and numerous other legal questions regarding administrative problems.

**Admiralty Division.**

The admiralty division advises as to maritime contracts and claims, ship's title papers, charter parties, bills of lading, and other operating contracts, and as to salvage, general average, collisions, cargo claims, seamen's claims, construction of the navigation laws, and other admiralty, maritime, and shipping problems.

Among the more important matters handled by the admiralty division during the past year are the following: Adjustment of numerous problems growing out of the requisition of the use of vessels and their redelivery to owners; ex-German and ex-Austrian ship questions; the commercial relations with the Army and Navy as to vessels turned over to them by the Board, including a large number of claims growing out of redelivery of vessels to the Board by those departments; drafting uniform commercial documents with particular reference to bills of lading; salvage questions, including commercial salvage stations; drafting, managing, and operating agency agreements; drafting the act of March 9, 1920, granting to Shipping Board vessels immunity from process, and providing in lieu thereof suits in personam against the United States; settlement of questions arising under that act; handling of admiralty cases up to the time suit is filed and cooperating with the Department of Justice in handling litigation; drafting of ship mortgage act, 1920, and handling questions arising under same; drafting of a Federal seamen's compensation bill as a result of the decision of the Supreme Court in *Knickerbocker Ice Co. vs. Stewart* (40 Supreme Court Reporter, 438), holding the act of October 6, 1917, extending remedies under State compensation laws to maritime injuries unconstitutional; drafting a revision of the navigation laws, both as to form and substance, in accordance with the recommendation of the navigation laws revision committee; drawing of various charter parties; bunker-license questions; large numbers of admiralty questions, such as collisions, salvage, charter party, and bill of lading questions, demurrage, maritime insurance, general average, seamen's claims and marine claims; questions arising under the navigation laws, and a large number of other miscellaneous admiralty, marine, and shipping questions.

The admiralty division maintains an office in New York for handling the numerous questions arising in that port.

A special article will be found elsewhere in this report on the most important of these matters.

#### PROBLEMS IN THE CONDUCT OF LITIGATION.

Under the Executive order of May 31, 1918, and the instructions of the Attorney General based upon this order, the conduct of litigation is placed in the hands of the Department of Justice. The particular facts of all cases are within the knowledge of Shipping Board counsel and the cooperation of the counsel is of prime importance. This is particularly true in the admiralty division, where the law is of a technical nature and because the admiralty cases form a large part of all the Shipping Board litigation. Section 3 of the merchant marine act, 1920, provides:

The Board may adopt rules and regulations in regard to its procedure and the conduct of its business. The Board may employ within the limits of appropriations made therefor by Congress such attorneys as it finds necessary for proper legal service to the Board in the conduct of its work, or for proper representation of the public interest in investigations made by it or proceedings pending before it whether at the Board's own instance or upon complaint, or to appear for or represent the Board in any case in court or other tribunal. The Board shall have such other rights and perform such other duties not inconsistent with the merchant marine act, 1920, as are conferred by existing law upon the Board in existence at the time this section as amended takes effect.

Under this authority the admiralty division has secured the services of additional counsel, who are familiar with this branch of practice and whose experience with the Shipping Board enables them to obtain a firm grasp of the facts in each case. Under the present arrangement the attorneys of the Department of Justice and of the Shipping Board work together in the presentation and prosecution of cases, bearing in mind that the final responsibility rests with the Department of Justice. This plan has worked out successfully and the handling of admiralty litigation is now upon a definite and secure basis.

#### SUITS IN ADMIRALTY, ACT OF MARCH 9, 1920.

The decision of the Supreme Court in the *Lake Monroe* case held Shipping Board vessels in commercial service subject to libel and arrest under section 9 of the shipping act, 1916. In order to obtain the release of its vessels the Board was obliged in each instance to give an Emergency Fleet Corporation stipulation to pay the final decree of the court. One of the principal objects of the act of March 9, 1920, was to do away with the delay to Shipping Board vessels consequent on their arrest by judicial process and to obviate the giving of any stipulation to pay the decree, this latter being



deemed unnecessary in view of the unquestioned solvency of the United States.

The act of March 9, 1920, accomplishes this object by prohibiting the arrest or seizure by judicial process, in the United States or its possessions, of vessels or cargoes owned or possessed by the United States, but preserving all the rights of libellants by providing that in all cases where, if the vessel or cargo were privately owned or possessed, a proceeding in admiralty could be maintained, a libel in personam may be brought against the United States or against the Emergency Fleet Corporation. A doubt has been expressed whether this act authorizes suits in personam against the United States only in case where, but for the act, suits in rem would have lain against the vessel or cargoes, or whether a suit in personam can now be maintained against the United States in all cases where, were the litigants private parties, any proceeding in admiralty, either in rem or in personam, could be maintained. This question is now before some of the district courts.

The act further provides that in cases where Shipping Board vessels are arrested in foreign ports the Secretary of State, in his discretion, upon the request of the Attorney General or any other officer duly authorized by him, may direct the United States consul to claim such vessel immune from arrest and to execute an agreement, undertaking, bond, or stipulation for and on behalf of the United States, as required by the court, for the release of the vessel or cargo and for the prosecution of any appeal.

#### SHIP MORTGAGE ACT, 1920.

Section 30 of the merchant marine act, 1920, is the "ship mortgage act, 1920." It changes in many important ways the law of ship mortgages as it has hitherto existed. Until the passage of this act (June 5, 1920) mortgages on ships afforded the mortgagee a very imperfect security. The reason was that all maritime liens, though arising subsequent to the recording of the mortgage, took precedence over the mortgage. These maritime liens might be sufficient in amount to wipe the mortgage out altogether and leave the mortgagee nothing. The ship mortgage act, 1920, alters this situation by allowing the mortgagee, upon complying with certain requirements of the new law, to give his mortgage the status of a "preferred mortgage." The principal of these requirements are: (1) Indorsing a memorandum of the mortgage on the vessel's documents; (2) recording the mortgage in the office of the collector of customs at the port of documentation of the vessel; (3) filing an affidavit that the mortgage

is made in good faith and without any design to hinder, delay, or defraud creditors of the mortgagor or lienors of the vessel; and (4) the mortgagee must be a citizen of the United States. A "preferred mortgage" takes precedence over maritime liens arising subsequent to the recording and indorsement of the mortgage, except the following: Liens for damages arising out of tort; for wages of a stevedore employed directly by the owner, operator, master, ship's husband or agent of the vessel; for wages of the crew of the vessel; for general average; and for salvage. But—and this is the great change in the law as it has hitherto existed—most of the maritime liens arising out of contract, such, for example, as liens for repairs, supplies, towage, bottomry, etc., must now take a rank inferior to the preferred mortgage unless they were incurred prior in time to that mortgage.

This new law provides that preferred mortgages may be foreclosed by admiralty suits in rem in the district courts of the United States. While some doubt has been expressed as to the power of Congress to provide this method of foreclosure, it is believed that doubt is unfounded.

The improved status given by this law to ship mortgages should make it easier for shipowners to borrow money, and so aid them in gradually purchasing the Government-owned vessels of the Shipping Board and building up a privately owned American merchant marine.

#### CODIFICATION OF THE NAVIGATION LAWS.

The Shipping Board has been aware of the need of undertaking a thorough revision and codification of the navigation laws of the United States. Some of these laws were enacted by the First Congress, which assembled immediately after the adoption of the Constitution, and it is literally true that enactments of some sort dealing with navigation have been adopted by every Congress since that time. This has resulted in confusion, not only because of the number and diverse nature of the enactments but also because they are the result of many different policies. The Bureau of Navigation has performed a useful service by publishing at intervals a compilation of the laws in force, but no attempt has been made to codify these enactments or reduce them to authoritative, systematic form. In order to clarify the law and to remove from it all contradictory and obsolete matter and to introduce such new provisions as may seem advisable, the Board had undertaken a systematic codification of the navigation laws of the United States.

In the work which the Board has undertaken it will have the cooperation of the navigation laws revision committee, which has

already accomplished much, and which, at the request of the Board, will continue in existence until the codification is completed.

#### UNIFORM COMMERCIAL DOCUMENTS.

The Board is endeavoring to standardize commercial documents such as bills of lading, charter parties, etc. The Board, as the largest shipowner in the world, feels that it has an imperative duty to take the lead in bringing about the use by the whole shipping world of documents of this character that will be standard and uniform. Of course, no bill of lading can be made to serve the purpose for all trades in the world. It will be necessary to classify the various trades and to adopt separate bills of lading for each particular trade, having regard to the peculiarities of that trade. The charter parties must, for the same reason, be subjected to careful analysis and classification. When, however, the various trades are so classified, there is no reason why the uniform standard document should not be used by all shipowners in that trade. The Shipping Board has therefore undertaken this work. The standardization of documents is especially necessary in the case of managers of Shipping Board vessels. Otherwise, one manager, more eager for business than the others, will relax the restrictions in a bill of lading or charter party intended for the protection of the ship and so, by making more favorable terms to the shipper, obtain his business away from the other managers who refuse to make concessions to the shipper that would be detrimental to the Board's interest. Since the compensation to managers is percentage of the profits they earn for the Board, there is necessarily competition among them. The more business they secure the greater their profits and consequently the greater their compensation. This compensation should always be fair and should always be conducted with regard to the Board's interest. All bills of lading and charter parties being a compromise between the respective rights of the ship and the shipper, every concession made to the ship is a sacrifice by the shipper. The Board can not permit the competition between managers to result in managers bartering away in the various clauses in these commercial documents provisions intended for the ship's protection. To allow one manager to secure business by waiving bill of lading conditions intended for the protection of the ship and to insist on other managers in the same trade complying with these conditions is merely to punish the manager who has stayed loyally by the Board and to reward the less scrupulous one who has not been willing to guard the Board's interest.

**SALVAGE SERVICES.**

The operation of the Shipping Board fleet has resulted in numerous accidents calling for salvage services. From July 1, 1919, to June 30, 1920, salvage services were rendered to 118 Shipping Board vessels. A large number of these services were of minor losses and a great many have been settled. During the same period Shipping Board vessels have rendered salvage services to a large number of foreign vessels for which payment has either been received or which are in the process of settlement. The Shipping Board, in making salvage settlements, has endeavored to place salvage awards on a sound commercial basis, awarding to the salvor expenses and a generous bonus rather than treat salvage services as an opportunity for undue enrichment. In all salvage cases, the Board has endeavored to secure for the crew and its vessel a fair bonus, thus saving the necessity of litigation.

The Navy Department has turned over to the United States Shipping Board three Navy mine sweepers, which are now being altered and conditioned as salvage tugs. It is the purpose of the Shipping Board in the near future to assign these tugs to one or more salvage companies to be stationed at points on the Atlantic coast and Gulf of Mexico and thus insure greater protection to all shipping coming within these waters.

**RELATIONS WITH THE ARMY AND NAVY AS TO VESSELS USED BY THOSE DEPARTMENTS.**

During the existence of the Shipping Board, a large number of vessels owned, seized, or requisitioned have been turned over to the War and Navy Departments for operation. These departments assumed all the Shipping Board's obligation of requisitioned vessels so allocated. The seized and owned vessels were taken over by the War and Navy Departments with the understanding that those departments assumed all war and marine risk together with other usual obligations of a bareboat charter.

The War Department for the fiscal year 1918-19 was relieved from the payment of charter hire for the use of Government-owned vessels. The number of vessels in the service of the War Department in July, 1919, was 164, of a total dead-weight tonnage of 1,356,206. This number has gradually decreased, and on June 30, 1920, there remained only 15 vessels of an aggregate dead-weight tonnage of 170,597. In the Navy Department service in July, 1919, there were 21 vessels of a total dead-weight tonnage of 139,318, whereas on June

30, 1920, there remained in the Navy service 2 vessels of a total dead-weight tonnage of 22,267.

*Monthly report of United States Shipping Board vessels in Army service for 12 months ending June 30, 1920.*

Month.	Number of ves-sels.	Total dead-weight tonnage.	Month.	Number of ves-sels.	Total dead-weight tonnage.
1919			1920		
July.....	164	1,356,206	January.....	20	204,700
August.....	133	1,155,306	February.....	16	175,295
September.....	112	947,052	March.....	14	161,775
October.....	64	613,236	April.....	15	170,597
November.....	32	304,100	May.....	15	170,597
December.....	24	231,034	June.....	15	170,597

*Monthly report of United States Shipping Board vessels in Navy service for 12 months ending June 30, 1920.*

Month.	Number of ves-sels.	Total dead-weight tonnage.	Month.	Number of ves-sels.	Total dead-weight tonnage.
1919.			1920.		
July.....	21	139,318	January.....	5	52,422
August.....	17	122,303	February.....	3	31,645
September.....	11	77,587	March.....	2	22,674
October.....	10	91,415	April.....	2	22,674
November.....	7	71,108	May.....	2	22,674
December.....	5	52,422	June.....	2	22,674

**GERMAN AND AUSTRIAN VESSELS SEIZED DURING THE WAR.**

During the year the former German vessels seized by the United States, and which have been allotted to the Board, have nearly all been sold or chartered with option to purchase. In fact, all of the cargo vessels have thus passed into private hands, while all but 11 of the passenger vessels have been so disposed of. These remaining 11 vessels have a gross tonnage of 150,152 tons. No disposition has yet been made of the one Austrian vessel seized, the *Martha Washington*, of 8,312 gross tons. Negotiations for sale of some of these are now under way, and doubtless all of them that are salable will in a short time be in private control.

For a time the right of the Board to sell these ships was questioned, but this power has now been expressly and definitely given the Board by the merchant marine act, 1920.

In this connection attention should be called to the fact that the recommendation made by the Board, on pages 19 and 20 of the first annual report, that machinery and appropriation be provided for adjudication of claims of other than enemy citizens against these seized vessels, has not yet been acted upon by Congress. While these claims should doubtless all be finally presented to the State

Department for settlement at the time any treaty with Germany and Austria is concluded, yet in view of the delay in the signature of the treaty it is again and urgently recommended that provision be made for the settlement of these claims. The Board can not accept the argument put forward by some that these claims can be enforced against the ships themselves.

Of the enemy tonnage secured from other countries, the four vessels obtained by the Board from Uruguay and kept in its service have all been returned, as have been three of the four which were subchartered to Great Britain, while all but two of the vessels, the *Callao* and *Eten*, have been returned to Peru, aside from the two vessels, *Pisco* and *Salaverry*, which were subchartered to the British and by them to the French.

*Status of seized German and Austrian vessels June 30, 1920.*

Name of vessel.	Dead-weight tonnage.	
<i>Passenger and freight.</i>		
Aeolus.....	12,350	Munson Steamship Line, as inspector during repair.
Agamemnon.....	8,700	American Line.
America.....	20,765	War Department.
Amphion.....	8,070	Unassigned.
Antigone.....	11,000	War Department.
Artemis.....	7,027	France & Canada Steamship Corporation.
Ascutney.....	6,450	Black Diamond Steamship Co.
Black Arrow.....	7,050	New York & Cuba Mail Steamship Co.
De Kalb.....	8,200	United States Shipping Board.
Freedom.....	6,440	J. H. Winchester.
George Washington.....	13,300	American Line.
Huron.....	11,080	Munson Steamship Line.
Leviathan.....	15,000	American Line.
Madawaska.....	6,850	War Department.
Mercury.....	10,350	United States Shipping Board (War Department).
Mount Vernon.....	8,300	War Department.
Nansemond.....	15,002	Do.
Orion.....	5,610	Kerr Steamship Co.
Otsego.....	5,200	United States Shipping Board.
Philippines.....	13,302	France & Canada Steamship Co.
Pocohantas.....	10,550	War Department.
Porto Rico.....	4,760	Munson Steamship Line.
President Grant.....	19,810	War Department.
Princess Matoika.....	10,500	Do.
Susquehanna.....	11,650	Phelps Bros. Co.
Von Steuben.....	6,900	Unassigned.
Wyandotte.....	5,700	South Atlantic Maritime Corporation.
Seized Austrian:		
Martha Washington.....	6,500	Munson Steamship Line.
Total (28 vessels).....	278,226	
<i>Freight.</i>		
Andalusia.....	7,475	Wyman Steamship Corporation, bare boat.
Arcadia.....	6,915	Do.
Astoria.....	4,650	Navy Department.
Honolulu.....	8,150	Moore & McCormack.
Midget.....	660	Philippine Government:
Neuse.....	6,890	Wyman Steamship Corporation, bare boat.
Nipisc.....	3,200	Philippine Government.
Pawnee.....	6,850	Wyman Steamship Corporation, bare boat.
Quinnebaug.....	2,000	Philippine Government.
Marcia.....	2,700	Do.
Rappahannock.....	12,674	War Department.
Total (11 vessels).....	62,164	

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 33

Status of seized German and Austrian vessels June 30, 1920—Continued.

EX-GERMAN VESSELS SOLD AS OF JUNE 30, 1920—Continued.

Name of vessel.	Dead-weight tonnage.	Purchaser.
<i>Gas.</i>		
Atlas.....	209	Philippine Government. Do.
Hermes.....	148	
Total (2 vessels).....	357	
<i>Freight.</i>		
Ex-German vessels chartered from Cuba:		
Adelheid.....	3,810	Released.
Bavaria.....	6,800	
Constantia.....	4,400	
Olivant.....	5,800	
Ex-German vessels chartered from Peru:		
Callao.....	8,200	Munson Steamship Line (as inspectors). United States & Australasia Line.
Eten.....	6,500	
Total (2 vessels).....	16,700	
<i>Wood sail.</i>		
Montauk.....	2,214	Struthers & Dixon.

Total vessels under United States Shipping Board control, June 30, 1920, 45; total dead-weight tonnage, 369,171.

EX-GERMAN VESSELS UNDER CONTROL OF UNITED STATES NAVY.

Name of vessel.	Dead-weight tonnage.	Name of vessel.	Dead-weight tonnage.
<i>Transport.</i>		<i>Freight and passenger—Continued.</i>	
Bath.....	3,978	Quincy.....	5,100
Beaufort.....	2,600	Savannah.....	6,980
Bridgeport.....	10,000	<i>Freight.</i>	
Camden.....	9,781	Gulfport.....	4,334
Newport News.....	5,270	Kittery.....	1,690
<i>Freight and passenger.</i>		Samos.....	456
Houston.....	4,800	Atlas.....	314
Long Beach.....	1,987	Total (14 vessels).....	63,240
Pensacola.....	6,040		

EX-GERMAN VESSELS SOLD AS OF JUNE 30, 1920.

Name of vessel.	Dead-weight tonnage.	Purchaser.
<i>Freight and passenger.</i>		
Cuba, ex-Sachem.....	4,246	Pacific Mail Steamship Co.
Gen. O. H. Ernest.....	5,300	Panama Railroad Co.
Gen. G. W. Goethals.....	5,437	Do.
Gen. W. C. Georges.....	5,520	Do.
Gen. H. F. Hodges.....	4,065	Do.
Poznam, ex-Suwanee.....	11,250	Polish American Navigation Co.
Watauga.....	2,200	World Wide Trading Co.
<i>Freight.</i>		
Armenia.....	6,962	Victor Fox & Co.
Casco.....	7,900	French American Line.
Commercial Pride, ex-Nyanza.....	7,976	Moore & McCormack.
Coosa.....	2,625	Victor S. Fox & Georges Creek Steamship Co.

34 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

EX-GERMAN VESSELS SOLD AS OF JUNE 30, 1920—Continued.

Name of vessel.	Dead-weight tonnage.	Purchaser.
<i>Freight—Continued.</i>		
Iosca.....	1,200	E. W. Loughead Co. (Ltd.).
Isonomia.....	6,020	Victor S. Fox & Georges Creek Co.
Jamaica, ex-Tacony.....	2,200	Bluefields Fruit & Steamship Co.
Monticello.....	11,365	American Ship & Commerce Co.
Montpelier.....	9,675	Do.
Oconza.....	4,116	E. H. Gross & Co.
Osage.....	7,220	Moore & McCormack.
Pequot.....	8,879	Wyman Steamship Co. (Inc.).
Rajah.....	3,250	French American Line.
Raritan.....	1,600	Torpe & Weise.
Tagua, ex-Minnow.....	200	Williams Dimond Steamship Co. (Resold by them.)
Tunica.....	7,653	French American Line.
Wabash.....	6,775	Do.
Wachusett.....	6,160	Do.
Yadkin.....	2,898	World Wide Trading Co.
Wacouta.....	3,400	New York & Cuba Mail Steamship Co.
Yasco.....	2,200	Fernandez Hermanos.
Yuca.....	4,360	French American Line.
Yuma.....	2,500	Tropical Fruit Co.
Kermit, ex-Apples.....	11,200	American Ship & Commerce Co.
<i>Sailing vessels.</i>		
Arapahoe.....	3,000	Victor S. Fox & Georges Creek Steamship Co., jointly.
Chillicothe.....	3,600	Do.
Monongahela.....	4,150	Do.
Moshulu.....	4,250	Do.
Muscoota.....	4,312	Do.
Tonawanda.....	2,247	Do.
Total (37 vessels).....	190,013	

EX-GERMAN VESSELS SUNK.

Name of vessel.	Dead-weight tonnage.	Name of vessel.	Dead-weight tonnage.
<i>Freight and passenger.</i>		<i>Freight—Continued.</i>	
Covington.....	12,357	Ticonderoga.....	7,500
President Lincoln.....	19,800	Tippecanoe.....	8,968
<i>Freight.</i>		<i>Sailing vessels.</i>	
Actaeon.....	7,347	Wamsutta.....	2,262
Chattahoochee.....	11,000	Total (9 vessels).....	77,360
Owasco.....	5,180		
Quantic.....	2,949		

TRANSFER OF SHIPS TO FOREIGN REGISTRY.

During the past year, until June 5, 1920, applications for the transfer of American vessels to foreign registry were considered under the provisions of sections 9 and 37 of the shipping act, 1916, as amended by the act of June 15, 1918. Section 18 of the merchant marine act, 1920, amended section 9 of the shipping act, 1916, and such requests have since been considered under such amendment. By reason of the fact that a proclamation has not been issued by the President or a declaration of peace adopted, the Board still has jurisdiction over American-owned undocumented vessels under the provisions of section 37 of the shipping act, 1916, as amended, which section will remain in force until the issuance of a proclamation



by the President declaring the national emergency at an end, or the declaration of peace. After such proclamation is issued or peace is declared the provisions of section 37 will be imperative and the Board will then have jurisdiction under the provisions of section 18 of the merchant marine act, 1920, in so far as approving transfer of American vessels to foreign registry is concerned over documented vessels only.

Each application for transfer of an American vessel to foreign registry is considered upon its individual merits, and the applicant is required to state his reasons for desiring the transfer, and to show why it is not desirable to retain the vessel in operation under the American flag. The applicant is also required to furnish a statement showing the use to which the proposed transferee intends to put the vessel, thus enabling the Board to determine whether the transfer should be granted, or whether the vessel should be retained under the American flag.

Owing to the unsettled conditions in Mexico but few transfers have been granted to Mexican registry during the year, the greater part of those granted being of vessels for use in the oil trade.

The policy of the Board has been to grant transfers only in such cases as it could be shown that such transfer would be of benefit to the owner of the vessel, and would in no wise impair the efficiency of the American merchant marine, and owing to the peculiar character of the requirements of the marine service of our country it is necessary to scrutinize closely applications for the transfer of small as well as large vessels.

From July 1, 1919, to June 30, 1920, inclusive, the Board authorized the transfer of the following tonnage:

	Gross tonnage.
305 wooden vessels.....	155,686
55 steel vessels.....	97,879
6 iron vessels.....	7,967
1 composite vessel.....	2,100
Total (367 vessels).....	263,632

#### RECRUITING SERVICE.

The Recruiting Service consists of the navigation and engineering schools for training licensed officers, the sea-training bureau for training men below the grade of licensed officers, and the sea-service bureau for placing on ships officers and men trained by the service as well as from other sources.

##### Navigation and Engineering Schools.

There are 13 navigation and 6 engineering schools for training of officers located on the Atlantic, Gulf, and Pacific coasts and the Great Lakes. These schools (excluding turbine training) have a total average attendance of about 400 men. The average attendance has

been lowered somewhat during the last few months of the fiscal year by reason of increased requirements for entrance for the purpose of raising the standard of men turned out. Only men with satisfactory sea experience on deck are accepted for the navigation schools, and those with satisfactory mechanical or engineering experience for the engineering schools.

The total number of graduates for the fiscal year ending June 30, 1920, is 5,763, of which number 4,197, or 73 per cent, have already been licensed, while a considerable number now at sea as cadet officers and in regular berths on ships will later receive licenses. The total number of graduates, together with the grades of licenses received by graduates from June, 1917, when the first school was established, to date are as follows:

Total number of graduates.....	13, 412
Total number of graduates licensed as—	
Masters .....	263
First mates .....	430
Second mates .....	1, 788
Third mates .....	3, 303
	5, 784
Total number of graduates licensed as—	
Chief engineers.....	185
First assistant .....	519
Second assistant .....	1, 478
Third assistant .....	1, 676
	3, 858
Total number of graduates licensed.....	9, 642

The above figures show that 72 per cent of all the graduates of the navigation and engineering schools hold licenses.

#### Schools for Turbine Training.

In addition to the training of men for original licenses or raises in grades, the Recruiting Service maintains a system for training licensed men experienced in operating reciprocating engines, in the operation and repair of marine turbines, including the electric drive. The number of engineers trained in operation of geared turbines during the fiscal year was 236. Prior to June 30, 1919, 136 engineers had been trained in this course.

The instruction and work in these Recruiting Service turbine classes is of a practical character, with classroom work, shop work, lectures, and blue-print study under competent instructors, so arranged as to give the best results in the six weeks' course. Training of licensed engineers on the electric drive was started on May 3, 1920, and thus far 12 men have been graduated from the course. Only men with broad knowledge of and experience with electricity, as well as experience and knowledge of steam engineering, are selected for this branch of the work.

Only a few men have been trained for the operation of the Diesel type of engines. This work was stopped because of lack of demand for men so trained. However, the training can and will be resumed as soon as the demand for it begins to develop.

#### Sea Training Bureau.

Under this branch of the service three training stations are maintained; one with its base at Camp Stuart, Va., another at San Francisco, Calif., and the other at Seattle, Wash. Four wooden ships, fitted as combination cargo carriers and training ships, are operated on the Atlantic coast and to the West Indies, carrying about 1,200 tons of cargo and 150 apprentices each.

The steamship *Iris*, used at San Francisco during the war as a training ship, has been put out of commission and is being offered for sale. A new 8,800-ton steel ship, the *Hollywood*, has been substituted for the *Iris*, and will carry about 150 apprentices in the bridge deck space, and thus leave the full cargo space available. The *Iris* is 35 years old and could not be fitted to carry any cargo without the expenditure of a considerable sum of money.

The wooden ship *Brookdale* carries about 1,800 tons of cargo and 115 apprentices and is operated from the Seattle station on the triangular run from there to the Hawaiian Islands, thence to San Francisco, and back to Seattle.

The average period of training is now from two to three weeks at the stations and about five to six weeks on the ships.

The following table shows the number of men for each department graduated from each of the three stations during the fiscal year:

Station.	Deck.	Engine.	Steward.	Total.
Seattle.....	616	509	259	1,384
San Francisco.....	530	496	225	1,251
Camp Stuart.....	1,801	2,055	1,543	5,399
Grand total.....	2,947	3,060	2,027	8,034

The total number of men trained for the unlicensed ratings by this service from the establishment of the bureau in January, 1918, to June 30, 1920, is 32,335.

#### Sea Service Bureau.

The sea service bureau maintains agencies at 21 American ports. During the period July 1, 1919, to June 30, 1920, the bureau placed 160,863 officers and men. Of this number 65.7 per cent were American citizens. About 15 per cent of the total number were graduated from the Shipping Board Recruiting Service.

The following table shows the number of officers and men of every grade placed by each agency:

Record of placements by entire bureau for fiscal year, July 1, 1919, to June 30, 1920.

	Bos- ton.	New York.	Phila- del- phia.	Balti- more.	Nor- folk.	Ser- van- nah.	Jack- son- ville.	Tram- pa.	New Orle- ans.	San Fran- cisco.	Seat- tle.	Cleve- land.	Port- land.	San Ped- ro.	New- port News.	Gal- veston.	Mo- bile.	As- toria.	Chi- cago.	Du- luth.	De- troit.	Total.
Masters.....	71	157	24	22	82	15	10	9	112	75	130	21	102	2	23	23	19					873
First officers.....	390	591	158	135	240	68	28	18	170	110	160	165	119	7	1	41	38					2,433
Second officers.....	355	709	262	172	319	60	28	23	202	104	159	169	135	7	3	47	44					2,788
Third officers.....	276	642	317	208	304	70	46	24	242	116	165	146	97	8	5	54	50					2,770
Fourth officers.....	9	9	5	4	5	3	3	1	2	10	2	1	1	1	1	1	1					36
Cadet deck officers.....	12	75	20	16	13	3	3	1	21	27	2	1	1	1	1	3	17					194
Carpenter's mates.....	56	377	229	135	103	56	34	8	102	56	156	1	86	11	51	34	17					1,512
Boatswain's mates.....	182	694	339	247	195	84	33	12	171	58	154	1	94	14	69	44	35					2,428
Boatswain's mates.....	30	97	4	10	24	4	4	2	13	10	2	1	1	1	19	1	2					15
Quartermasters.....	3,195	3,709	3,970	3,709	2,968	1,759	652	154	2,899	496	1,796	374	978	148	1,103	811	500					222
Able seamen.....	1,359	3,184	2,155	1,332	1,508	821	326	112	1,111	1,040	882	169	484	102	651	326	241					86,276
Ordinary seamen.....	7	7	4	2	2	2	2	1	1	32	1	1	3	3	5	3	2					15,949
Deck apprentices.....	103	4	207	21	72	36	14	10	145	10	132	61	22	5	47	47	29					777
Radio operators.....	124	348	111	36	258	60	18	18	141	56	132	177	90	3	34	28	28					1,631
Chief engineers.....	202	641	160	111	326	78	29	22	223	61	165	196	92	3	2	52	70					2,483
First assistant engineers.....	222	669	189	120	377	98	40	25	247	52	154	145	100	4	4	60	52					2,558
Second assistant engi- neers.....	266	689	216	123	351	98	31	24	273	61	168	160	92	6	4	62	62					2,686
Third assistant engi- neers.....	19	97	96	16	23	2	1	1	62	46	7	1	1	1	18	17	10					368
Cadet engineer officers.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3					4
Refrigerator engineers.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15					15
Electricians.....	9	105	106	47	52	32	11	5	28	21	112	39	39	11	18	17	10					628
Deck engineers.....	5	27	18	18	22	2	2	3	54	188	502	183	269	49	288	187	167					80
Pump men.....	93	810	529	462	384	136	120	47	241	78	345	2	250	45	160	96	66					7,763
Oilers.....	375	920	737	775	402	216	77	544	544	188	502	183	369	49	288	187	167					8,678
Water tenders.....	93	810	529	462	384	136	120	47	241	78	345	2	250	45	160	96	66					9
Storekeepers.....	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					176
Firemen.....	2,017	5,141	2,410	2,238	2,639	1,263	508	175	1,862	231	805	278	521	46	855	468	427					22,229
Wipers.....	124	790	522	446	340	62	42	42	422	236	364	86	169	56	213	262	140					4,578
Coal passers.....	1,108	3,299	1,191	1,165	1,362	600	231	100	867	104	433	54	421	6	547	235	185					11,984
Engineer apprentices.....	33	19	105	180	314	97	40	15	212	80	150	74	88	2	56	68	61					78
Chief stewards.....	121	697	105	6	17	4	1	1	8	2	8	83	126	15	121	115	95					2,444
Second stewards.....	288	1,082	273	500	560	251	87	41	412	30	166	83	126	15	121	115	95					4,377
Chief cooks.....	249	1,182	282	467	624	240	99	32	513	41	180	3	161	11	133	132	97					4,488
Second cooks.....	24	158	36	108	218	80	20	3	104	3	104	3	104	3	30	69	4					868
Third cooks.....	24	158	36	108	218	80	20	3	104	3	104	3	104	3	30	69	4					868
Bakers.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2					2
Butchers.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2					2

Mess men.....	815	3,468	719	1,804	1,604	658	210	45	804	119	377	251	280	31	425	320	176	5	56	139	116	12,421
Mess boys.....	211	1,586	555	131	927	290	195	50	500	222	370	8	208	36	282	237	202	5	5	139	10	6,124
Painter.....	1	31	1	5	4	2	2	.....	5	4	3	.....	.....	.....	4	5	1	.....	.....	.....	.....	72
Junior officers.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	13
Miscellaneous.....	161	612	231	118	170	46	37	15	119	157	250	70	187	17	63	21	28	5	5	.....	1	2,808
Total.....	12,500	39,991	16,401	14,878	17,326	7,779	3,438	1,118	12,879	3,907	8,297	2,881	5,257	638	5,081	3,912	2,908	113	451	785	673	116,863

165.7 per cent American.

**INSURANCE DIVISION.**

On October 9, 1918, the Division of Insurance of the United States Shipping Board Emergency Fleet Corporation was created to take the place of the advisory insurance committee of the Shipping Board. This action was taken owing to the rapidly growing importance of insurance work and because it was advisable to place in one office responsibility for action in the event of accidents to vessels controlled by the Board.

The marine and war risk premium rates are fixed by the Director of Insurance and in general follow the commercial market. Since the last report the only war risk perils have been from mines. These risks have been considerably reduced owing to the fact that some mines have been swept up and channels have been charted through the existing fields. War risk insurance has only been carried on trans-Atlantic voyages.

Very little change has been made in the duties performed by this division, but an effort has been made to broaden the protection granted to vessels controlled by the Board. Particular attention has been paid to the risks of collect freight, bunker coal on deck, extra bunkers under deck, and cash advanced to masters. A special effort has been made to follow up all general average and salvage cases, so as to recover from the cargo the full contribution due on account of the sacrifices and expenses incurred. In cooperation with the admiralty division, all collision and salvage claims against privately owned steamers have been pressed so as to recover all claims for the Board.

The rates of premium have been so regulated that all losses have been taken care of and a surplus credited on the books of the general comptroller. It is not the intention of this division to create a large surplus, but to keep rates as low as is compatible with security for any losses which may occur.

All insurance on steamers sold by the Board on a partial-payment plan must conform to certain regulations. The division passes on this insurance before steamers are delivered to the purchasers.

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 41

Losses of Shipping Board vessels from July 1, 1919, to June 30, 1920, inclusive.

Name.	Dead-weight tonnage.	Date of loss.	Remarks.
<b>Steel cargo:</b>			
Corydon.....	4,062	Sept. 9, 1919	Foundered and sunk in Bahama Channel.
Council Bluffs.....	4,140	Nov. 13, 1919	Sunk off Terschelling; total loss.
Lake Conway.....	2,875	Sept. 9, 1919	Lost in hurricane in Gulf.
Lake Licking.....	3,525	Feb. 21, 1920	Stranded off Cuba.
Lake Stobl.....	4,155	June 1, 1920	Stranded off Gota Islands.
Liberty Glo.....	7,600	Dec. 8, 1919	Struck mine in North Sea; total loss.
West Aleta.....	8,660	Feb. 19, 1920	Stranded off Terschelling.
West Arvada.....	8,800	Sept. 16, 1919	Sunk near Dutch coast; total loss.
Total (8 vessels).....	43,817		
<b>Steel refrigerator:</b>			
Polar Land.....	5,520	Nov. 9, 1919	Sunk 75 miles off Cape Breton.
Total (9 steel vessels).....	49,337		
<b>Wood cargo:</b>			
Abrigada.....	3,665	Dec. 31, 1919	Burned and sunk at wharf at Ponta del Gada.
Ammonoosuc.....	3,588	Oct. 16, 1919	Abandoned en route to Rotterdam; total loss.
Balabac.....	3,588	Mar. 6, 1920	Burned at Port of Spain Harbor.
Brookfield.....	3,665	Mar. 8, 1920	Burned off Fayal, Azores, at 2.30 a. m.
Brookland.....	3,665	Feb. 6, 1920	Burned in Habana Harbor.
Daram.....	3,588	Oct. 10, 1919	Sunk off Bermuda.
Euharlee.....	3,588	Nov. 3, 1919	Stranded in Mersey River.
Mayport.....	3,588	Jan. 23, 1920	Aground at Reneador Banks; total loss.
Milton.....	3,588	Oct. 2, 1919	Burned and sunk in Lisbon Harbor.
Natenna.....	4,700	Mar. 8, 1920	Stranded off Casa Blanca, Morocco; total loss.
Quoque.....	3,575	Jan. 13, 1920	Stranded off Miama, Fla.
Total (11 vessels).....	40,798		
<b>Wooden barge:</b>			
Richmond.....	3,500	Jan. 5, 1920	Stranded off Jacksonville.
Total (12 wood vessels).....	44,298		
<b>Concrete cargo:</b>			
Polias.....	3,500	Feb. 6, 1920	Grounded off Chilly Ledge, Me.
Grand total (22 vessels).....	97,135		

SUMMARY.

	Number.	Dead-weight tonnage.
Steel vessels.....	9	49,337
Wood vessels.....	12	44,298
Concrete vessels.....	1	3,500
Grand total.....	22	97,135

MARINE INSURANCE.

The third annual report called attention to the fact that the Shipping Board, cooperating with the Committee on Merchant Marine and Fisheries of the House of Representatives, had undertaken a thorough investigation of American marine insurance. This investigation has been completed, and the results and recommendations were published in a special "Report on the Status of Marine Insurance in the United States." This report presents fully the

economic importance of marine insurance; its use as a national commercial weapon; the number and importance of American companies; the volume and classification of the business as regards hull, freight, cargo, and builders' risk insurance, and with respect to coastwise and inland traffic and traffic in the foreign trade; the extent and nature of reinsurance; the appalling degree of foreign control and the reasons for such control; the nature and economic importance of reinsurance agreements; the operations of American Underwriters' Associations; and the factors underlying the making of marine insurance rates.

Marine risks written and renewed during 1918 by all companies, domestic and foreign, operating within the United States amounted to \$66,080,295,060. This total was arrived at after making deduction for motor-vehicle, tourist-baggage, and registered-mail insurance on the basis of premium income received from these sources as compared with the total premium income on all "marine and inland" business. Of the foregoing total, branch offices of foreign companies admitted to do business in the United States controlled 58.4 per cent, American companies controlled abroad through stock ownership 5 per cent, and strictly American companies 36.6 per cent. Net premiums of all American and foreign companies operating in the United States aggregated \$109,729,041. Of this total, the branch offices of admitted foreign companies controlled 35.9 per cent, American companies controlled abroad 1.4 per cent, and strictly American companies 62.7 per cent. These statistics, however, do not include the huge amount of marine insurance, originating in the United States, which is exported directly to the foreign market without appearing in any American records. Competent estimates indicate that such exported marine insurance is equal to at least 20 per cent of the total insurance originating within the country.

Briefly stated, the investigation demonstrated that American interests have largely lost their grip on marine insurance, and that probably no other vital branch of American commerce has passed so extensively under foreign control. Sixty-two direct-writing American companies participated in ocean marine insurance during 1918, but two-thirds of the business was transacted by only 10 companies, thus showing that five-sixths of the companies are small and relatively unimportant. Approximately two-thirds of all marine insurance originating in the United States (cargo and hull insurance combined) was found to be controlled by foreign underwriters. About one-fourth of all American marine insurance was found to be exported directly to the foreign market to be placed with non-admitted underwriters or with the foreign home offices of alien companies possessing branches in this country. With reference to hull



insurance, however, the proportion thus exported is at least equal to one-half of the total. The great majority of American companies reported that they did not emphasize hull and builders' insurance, a very large proportion of the latter form of insurance also being exported directly to the foreign market without appearing in any of the records on this side. American companies place approximately one-half of all their reinsurance with foreign underwriters, while the reinsurance placed by United States branch offices of foreign admitted companies with American companies is only about one-half the reinsurance placed by American companies with foreign admitted and nonadmitted underwriters.

The reasons for such an unfortunate state of affairs were traced to two main conditions, both unnecessary, viz, (1) the failure of American companies to cooperate in the manner followed by leading foreign competitors, and (2) the existence of numerous unnecessary and paralyzing legislative burdens and restrictions (especially unmerciful taxation) which are largely traceable to a short-sighted policy, continued during many years and prompted by local desires, which views marine insurance as purely a State matter rather than the national and international institution that it really is. The remedy was found to lie in (1) self-help on the part of American companies through cooperative action, especially in the form of a comprehensive insurance and reinsurance bureau; and (2) Federal and State assistance through the removal of unnecessary and burdensome legislative disabilities.

The first of these remedies, it is believed, has been realized through the creation of three comprehensive marine-insurance syndicates. These syndicates (known separately as Syndicates "A," "B," and "C," and collectively as The American Marine Insurance Syndicates) were formed at the instigation of the Committee on Merchant Marine and Fisheries of the House of Representatives and with the approval and cooperation of the Shipping Board. Some 50 strictly American companies will participate in Syndicates "A" and "B," whereas in the remaining syndicate (Syndicate "C") the American companies, representing at least two-thirds of the underwriting capacity, are supplemented by a number of foreign-admitted companies, whose participation is limited, however, to a one-third interest. This limited foreign interest is confined strictly to American branch offices of alien companies, which are subject to American control and which have for years been operating in conformity with our laws and paying taxes within the United States, and excludes participation by nonadmitted foreign underwriters. The head office of the syndicates will be located in Washington, D. C., but provision is made for a branch office in the city of New York and at other places to be selected by the board of managers.

The three syndicates referred to represent a radical departure in American marine-insurance practice, and their organization, it is believed, will constitute an epoch-making event in the history of American marine underwriting. They represent the first effort in our history to form a distinctly national policy in this important branch of commerce. For the first time also American companies have united in a comprehensive service plan for maintenance, inspection, and surveys, thus recognizing the importance of eliminating present waste and needless losses and costs. By acting through a single organization American companies are placed in a position to provide adequate reinsurance facilities, to obtain a proper spread of business, to greatly reduce their overhead charges, and to meet promptly and effectively any foreign competitive situation that may arise.

Briefly outlined, the most essential features of the newly organized syndicates, excluding details of organization and routine of operation, are the following:

**I. Syndicate A (Service Syndicate).**

Organized to perform, at cost, surveying, inspection, and loss surveys for the Shipping Board in respect to all steel vessels owned by the Board or sold by it on a part-payment basis, and to perform similar service in respect to any vessels for any other shipowners and marine underwriters upon payment of reasonable charges for such service. The syndicate shall create and maintain an organization for inspection, damage, and loss surveys, and to advise all interested parties with respect to matters relating to inspection, repair, equipment, loading, management, operation, efficiency, safety, and damage to and salvage and loss of vessels. It is not the intention, however, that this syndicate is to take the place of or perform the work of a classification society. Vessels are to be inspected approximately every four months, and the maintenance inspection shall show the condition of hull, machinery, galley, crew's quarters, and all parts of the vessel. Membership is limited to strictly American companies, but is open to all such companies that meet reasonable conditions of solvency and fair dealing. The Shipping Board agrees to enter, or cause to be entered, all steel vessels owned by it, and such vessels heretofore sold as the Board can lawfully cause or require to be entered with the syndicate. The Shipping Board also agrees that it will afford a reasonable opportunity to the surveyors or other representatives of the syndicate to make the surveys called for, in a United States port or in such foreign port as may be agreed upon from time to time. It is also agreed that with respect to all vessels hereafter sold the Shipping Board will require that the purchaser shall carry out the recommendations as detailed in the syndicate survey reports.

## II. Syndicate B.

Organized to insure all American steel steamships which the Shipping Board may hereafter sell to others to the full extent of the unpaid purchase price thereof, and also, to a like extent, such other American steel steamships heretofore sold by the Board that are acceptable for insurance to the syndicate. The syndicate is to have an underwriting capacity of not less than \$2,000,000 upon a single hull. Every company subscribing to the syndicate has allotted to it a definite percentage of every assumed risk by the syndicate underwriter. Rates of premium and policy forms may be altered as conditions require upon 10 days' written notice to the Shipping Board. The liability of the companies is several and not joint. Membership is limited to strictly American companies, but all such companies are acceptable if they meet reasonable standards of solvency and fair dealing. The subscribing companies agree to reinsure only with strictly American companies.

## III. Syndicate C.

Organized to insure all American ocean-going steel hulls when approved and accepted for marine insurance by the syndicate managers, and owned by private persons or corporations or in which they have an insurable interest. The syndicate has a total underwriting capacity of not less than \$2,500,000 upon a single hull. The liability of all subscribers is several and not joint, each one being committed in respect to each policy insured by the syndicate underwriter for the subscribing members pre-agreed percentage written opposite its name on the list of subscribers. Membership is divided into two groups. One group, representing at least two-thirds of the amount underwritten on any risk, consists entirely of strictly American companies, i. e., chartered under the laws of the United States or of any State thereof, domiciled therein, and not controlled by foreign interests. The second group, representing not to exceed one-third of the underwriting capacity of the syndicate, shall consist solely of subscribing companies of foreign countries duly authorized and licensed to transact marine insurance in the United States. Each syndicate subscriber may accept additional insurance on American hulls, outside of the syndicate arrangement, but can not do so at rates lower than those quoted by the syndicate. Nor can such additional insurance be reinsured, in part or in whole, outside of the syndicate, unless the syndicate declines to accept the business; nor shall such additional insurance diminish the underwriting obligations of such subscriber as a member of the syndicate.

With respect to Syndicate "A" and "B," in which the Shipping Board has a direct interest as owner of or mortgagee on vessels, it

should be stated that the books and accounts of the syndicates are always open to audit by a representative of the Shipping Board. Moreover, the Shipping Board, or Emergency Fleet Corporation, may designate a representative to be ex officio a member of the board of managers of the syndicate with the privilege to attend all meetings. The Shipping Board also possesses the right to withdraw from Syndicate "A" on 90 days' notice prior to any expiration date, and from Syndicate "B" upon 90 days' notice at any time. A similar right of cancellation is also given to the syndicate members. It may also be added that section 29 of the merchant marine act, 1920, provides that nothing contained in the antitrust laws "shall be construed as declaring illegal an association entered into by marine insurance companies for the following purposes: To transact a marine insurance and reinsurance business in the United States and in foreign countries and to reinsure or otherwise apportion among its membership the risks undertaken by such association or any of the component members."

The second remedy—the removal of existing legislative disabilities—is now receiving the earnest attention of the Shipping Board. The beneficial effect of the American Marine Insurance Syndicates will only eliminate partially the disadvantageous cost differential existing between American and foreign underwriters. To complete the task the numerous paralyzing and unnecessary legislative restrictions must be removed with a view to placing American underwriters on an equal footing with their foreign competitors. Many of the restrictions represent legislation applicable primarily to fire insurance, and marine insurance had the misfortune of sharing an unmerited fate by being grouped inadvertently with its larger companion without any real consideration of the vital difference between the two. Other restrictions date back to a time when insurance had not yet developed to its present state of constructive and systematic organization and when it was necessary to protect the public against schemes and practices which are not now likely to occur.

Under date of December 19, 1919, the Committee on Merchant Marine and Fisheries and the Shipping Board submitted an analysis of these legislative disabilities to all governors and State insurance commissioners. Replies from nearly all the marine States show an excellent response. The recommendations as outlined in the joint memorandum were heartily indorsed in nearly all instances, and in a number of cases a request was made for specific suggestions or a draft of the desired legislation. It should be added that a "Report on legislative obstructions to the development of marine insurance in the United States" is now in course of preparation. A comprehensive model marine insurance law is also in course of preparation

for adoption in the District of Columbia, with the hope that it may serve as a model to be followed by the several States.

### STATISTICAL STUDIES.

In the following series of tables there is given a general statistical summary of the vessels under the control of the Board, changes in the seagoing merchant marine, and a comparison of steel vessels in berth liner service.

Table I gives the changes in the United States seagoing merchant marine of 500 gross tons and over at the end of the fiscal years June 30, 1919, and June 30, 1920. It is the purpose of this table to draw a comparison of the merchant marine as of June 30, 1919, and June 30, 1920. On June 30, 1919, there were 1,729 steam vessels of 6,766,442 gross tons while on June 30, 1920, there are 2,442 vessels of 10,203,842 gross tons. This increase is due to the rapid delivery of Shipping Board vessels during the first six months of the fiscal year. The grand total for the fiscal year ending June 30, 1920, is 3,404 vessels of 11,278,741 gross tons. This shows an increase of 746 vessels of 3,523,887 gross tons over the fiscal year ended June 30, 1919.

Table II gives a recapitulation of ships controlled by the Shipping Board as of June 30, 1919. The vessels are classified as to their types and deadweight tonnage. The total shows that on June 30, 1919, the Board controlled 961 vessels of 5,346,939 dead-weight tons (this total including vessels of all types).

Table III gives a recapitulation of ships controlled by the Shipping Board as of June 30, 1920. The classification is similar to that given under Table II. A comparison of the recapitulations of June 30, 1919, and June 30, 1920, shows a considerable increase for steel cargo steamers for the fiscal year ending June 30, 1920. The total of all classes for the fiscal year ending June 30, 1920, is 1,574 vessels of 9,358,421 dead-weight tons compared to 961 vessels of 5,346,939 dead-weight tons for the year ending June 30, 1919.

Table IV shows a comparison of steel vessels in berth liner service as of May 31, 1920, and June 30, 1920. This comparison is shown by districts and ports for the two months, May and June. A statement is included which shows the net changes by districts on June 30, 1920. The total number of vessels operating on June 30, 1920 (excluding coastwise and tramp vessels), was 1,236 vessels of 8,398,272 dead-weight tons. This table gives a true picture of the activity of the various districts and ports, showing the number of vessels and number of managers.

48 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE I.—United States merchant marine on June 30, 1919, and June 30, 1920—Vessels of 500 gross tons and over.

Date.	500 to 999 gross tons.				1,000 gross tons and over.				Grand total.	
	Sail.		Steam.		Sail.		Steam.		Sail and steam.	
	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.	Num-ber.	Gross tons.
June 30, 1919.....	440	337,984	160	116,848	329	533,580	1,729	6,766,442	2,658	7,754,854
June 30, 1920.....	428	331,029	137	101,610	397	642,280	2,442	10,203,842	3,404	11,278,741
Decrease.....	12	6,955	23	15,238						
Increase.....					68	108,690	713	3,437,400	746	3,523,887

The great increase in steam vessels during the year ending June 30, 1920, is due to the rapid delivery of Shipping Board vessels during the first six months of the fiscal year. Deliveries from private construction constitute but a small proportion of the increase.

TABLE II.—Recapitulation of ships owned by the United States Shipping Board as of June 30, 1919.

	10,000 dead-weight tons and over.		9,000 to 9,999 dead-weight tons.		8,000 to 8,999 dead-weight tons.		7,000 to 7,999 dead-weight tons.		6,000 to 6,999 dead-weight tons.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
Steel cargo steamers.	39	434,894	50	470,229	147	1,270,871	72	554,596	15	97,129
Steel refrigerator steamers.....			2	19,532	5	42,180			3	18,282
Steel tank steamers.	6	64,187	5	45,892	3	26,891	4	28,132	1	6,997
Steel passenger steamers.....	3	38,814			1	8,970	1	7,050	3	19,872
Total.....	48	537,895	57	535,653	156	1,348,912	77	579,778	22	142,280

	5,000 to 5,999 dead-weight tons.		4,000 to 4,999 dead-weight tons.		3,000 to 3,999 dead-weight tons.		2,000 to 2,999 dead-weight tons.		Total.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
Steel cargo steamers.	48	253,525	95	395,973	184	640,596	48	130,927	698	4,238,740
Steel refrigerator steamers.....	5	27,754							15	107,748
Steel tank steamers.									19	172,099
Steel passenger steamers.....	7	38,272	5	20,910	2	7,200	4	8,445	26	149,433
Sailing vessels.....			2	9,100	3	10,250	2	5,061	7	24,411
Steel motor vessels.....					2	7,026			2	7,026
Wood cargo steamers			34	138,018	124	460,514	2	5,200	160	603,732
Composite cargo steamers.....			2	8,000	10	35,750			12	43,750
Tugs (ocean-going).....									15	
Tugs (harbor).....									7	
Total.....	60	319,461	138	572,001	325	1,161,336	56	149,633	961	5,346,939

TABLE III.—Recapitulation of ships owned by the United States Shipping Board as of June 30, 1920.

	10,000 dead-weight tons and over.		9,000 to 9,999 dead-weight tons.		8,000 to 8,999 dead-weight tons.		7,000 to 7,999 dead-weight tons.		6,000 to 6,999 dead-weight tons.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
Steel cargo steamers.	46	518,790	141	1,331,426	247	2,140,034	132	1,015,388	20	126,330
Steel refrigerator steamers.....	1	10,100	1	9,400	7	58,707	.....	.....	2	12,179
Steel tank steamers.	36	371,373	10	92,187	3	26,929	10	72,770	3	18,967
Steel passenger steamers.....	13	177,244	.....	.....	6	51,870	1	7,050	3	19,790
Steel transports.....	1	12,500	.....	.....	1	8,822	.....	.....	.....	.....
<b>Total.....</b>	<b>97</b>	<b>1,090,007</b>	<b>152</b>	<b>1,433,013</b>	<b>264</b>	<b>2,286,362</b>	<b>143</b>	<b>1,095,208</b>	<b>28</b>	<b>177,266</b>

	5,000 to 5,999 dead-weight tons.		4,000 to 4,999 dead-weight tons.		3,000 to 3,999 dead-weight tons.		2,000 to 2,999 dead-weight tons.		Total.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
Steel cargo steamers.	137	710,790	214	885,165	166	573,079	20	55,005	1,123	7,366,007
Steel refrigerator steamers.....	4	22,284	.....	.....	.....	.....	.....	.....	15	112,620
Steel tank steamers.	.....	.....	1	4,800	.....	.....	.....	.....	63	587,026
Steel passenger steamers.....	3	16,530	1	4,630	.....	.....	.....	.....	27	277,114
Steel transports.....	1	5,299	.....	.....	.....	.....	.....	.....	3	26,621
Wood cargo steamers	.....	.....	29	130,253	227	817,105	1	2,500	257	949,858
Composite cargo steamers.....	.....	.....	10	35,675	.....	.....	.....	.....	10	35,675
Concrete cargo steamers.....	.....	.....	4	13,500	.....	.....	.....	.....	4	13,500
Tugs (ocean-going).....	.....	.....	.....	.....	.....	.....	.....	.....	45	.....
Tugs (harbor).....	.....	.....	.....	.....	.....	.....	.....	.....	27	.....
<b>Total.....</b>	<b>145</b>	<b>754,853</b>	<b>259</b>	<b>1,074,023</b>	<b>393</b>	<b>1,390,184</b>	<b>21</b>	<b>57,505</b>	<b>1,574</b>	<b>9,358,421</b>

50 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE IV.—Comparison of steel vessels in berth liner service as of May 31, 1920, and June 30, 1920.

BY DISTRICTS AND PORTS (EXCLUDING COASTWISE AND TRAMPS).

	May 31, 1920.			June 30, 1920.			June, 1920.					
	Number of man-agers.	Number of ves-sels.	Dead-weight tonnage.	Number of man-agers.	Number of ves-sels.	Dead-weight tonnage.	Increase.			Decrease.		
							Number of man-agers.	Number of ves-sels.	Dead-weight tonnage.	Number of man-agers.	Number of ves-sels.	Dead-weight tonnage.
<b>NORTH ATLANTIC PORTS.</b>												
New York.....	54	291	2,293,070	58	273	2,043,545	.....	.....	.....	6	18	249,525
Norfolk.....	55	108	736,918	67	133	830,600	12	25	103,682	.....	.....	.....
Baltimore.....	36	88	615,989	41	101	734,896	5	13	118,007	.....	.....	.....
Philadelphia.....	24	53	370,803	30	75	520,722	6	22	149,919	.....	.....	.....
Boston.....	10	30	165,532	9	28	149,550	.....	.....	.....	1	2	16,982
Portland, Me.....	1	1	7,825	4	5	24,650	3	4	16,865	.....	.....	.....
Total.....	180	571	4,100,137	199	615	4,304,003	26	64	389,373	7	20	266,507
<b>SOUTH ATLANTIC PORTS.</b>												
Savannah.....	10	40	270,667	6	35	243,465	.....	.....	.....	4	5	27,172
Jacksonville.....	5	11	62,903	5	11	74,591	.....	.....	.....	.....	.....	.....
Charleston.....	6	9	51,392	10	14	83,248	4	5	31,856	.....	.....	.....
Wilmington, N. C.....	2	4	22,975	2	2	12,825	.....	.....	.....	.....	2	10,150
Total.....	23	64	407,937	23	62	414,159	4	5	43,644	4	7	37,322
<b>GULF PORTS.</b>												
Galveston.....	14	51	353,091	12	43	290,918	.....	.....	.....	2	8	62,173
New Orleans.....	17	85	489,975	21	95	564,619	4	10	74,644	.....	.....	.....
Mobile.....	10	34	191,600	7	35	190,169	.....	1	.....	3	.....	1,431
Pensacola.....	1	1	8,800	4	6	37,832	3	5	29,032	.....	.....	.....
Tampa.....	2	3	22,541	2	3	16,855	.....	.....	.....	.....	.....	5,686
Gulfport.....	1	1	4,050	2	2	11,875	1	1	7,825	.....	.....	.....
Total.....	45	175	1,070,057	48	184	1,112,268	8	17	111,501	5	8	69,290
<b>PACIFIC PORTS.</b>												
San Francisco.....	9	64	530,452	12	59	535,971	3	.....	5,519	.....	5	.....
Seattle.....	4	21	192,100	8	27	227,310	4	6	35,210	.....	.....	.....
Portland, Oreg.....	3	17	151,300	6	23	195,100	3	6	43,800	.....	.....	.....
Tacoma.....	1	1	4,160	4	4	26,410	3	3	22,250	.....	.....	.....
Los Angeles.....	1	4	35,200	.....	.....	.....	.....	.....	.....	1	4	35,200
Total.....	18	107	913,212	30	113	984,791	13	15	106,779	1	9	35,200

NET CHANGES, BY DISTRICTS, JUNE 30, 1920.

	Increase.			Decrease.		
	Number of man-agers.	Number of ves-sels.	Dead-weight tonnage.	Number of man-agers.	Number of ves-sels.	Dead-weight tonnage.
North Atlantic.....	19	44	122,866	.....	.....	.....
South Atlantic.....	.....	.....	6,223	.....	2	.....
Gulf.....	3	9	42,211	.....	.....	.....
Pacific.....	12	6	71,579	.....	.....	.....
Total.....	34	59	242,878	.....	2	.....



TABLE IV.—Comparison of steel vessels in berth liner service, etc.—Continued.

## TOTAL VESSELS OPERATING.

	May, 1920.		June, 1920.	
	Num-ber.	Dead-weight tonnage.	Num-ber.	Dead-weight tonnage.
North Atlantic.....	571	4,190,137	615	4,304,008
South Atlantic.....	64	407,937	62	414,159
Gulf.....	175	1,070,057	184	1,112,268
Pacific.....	107	913,212	113	984,791
Coastwise.....	87	425,303	74	347,666
Foreign.....	17	104,488	63	411,068
Unallocated.....	150	1,050,430	121	801,122
Unspecified ports.....	38	261,110	4	23,195
Total.....	1,209	8,422,674	1,236	8,398,273





























## FOREIGN TRADE.

Under section 7 of the merchant marine act, 1920, the promotion of foreign trade is a primary feature of the Shipping Board's work rather than as an incidental matter. This section remedies the situation existing under the shipping act, 1916, which was silent on this subject.

Section 7 of the merchant marine act provides:

That the Board is authorized and directed to investigate and determine as promptly as possible after the enactment of this act and from time to time thereafter what steamship lines should be established and put in operation from ports in the United States or any Territory, District, or possession thereof to such world and domestic markets as in its judgment are desirable for the promotion, development, expansion, and maintenance of the foreign and coastwise trade of the United States and an adequate postal service, and to determine the type, size, speed, and other requirements of the vessels to be employed upon such lines and the frequency and regularity of their sailings, with a view to furnishing adequate, regular, certain, and permanent service. The Board is authorized to sell, and if a satisfactory sale can not be made to charter such of the vessels referred to in section 4 of this act or otherwise acquired by the board, as will meet these requirements to responsible persons who are citizens of the United States who agree to establish and maintain such lines upon such terms of payment and other conditions as the Board may deem just and necessary to secure and maintain the service desired; and if any such steamship line is deemed desirable and necessary, and if no such citizens can be secured to supply such service by the purchase or charter of vessels on terms satisfactory to the Board, the Board shall operate vessels on such line until the business is developed so that such vessels may be sold on satisfactory terms and the service maintained, or unless it shall appear within a reasonable time that such line can not be made self-sustaining. The Postmaster General is authorized, notwithstanding the act entitled "An act to provide for ocean mail service between the United States and foreign ports, and to promote commerce," approved March 3, 1891, to contract for the carrying of the mails over such lines at such price as may be agreed upon by the Board and the Postmaster General: *Provided*, That preference in the sale or assignment of vessels for operation on

## TOTAL U. S. MERCHANT MARINE AND TONNAGE EMPLOYED IN FOREIGN TRADE

TOTAL MERCHANT MARINE	FISCAL YEAR	TONNAGE IN FOREIGN TRADE
1,458,738 D.W.T. 	1800	 1,000,661 D.W.T.
2,137,175 D.W.T. 	1810	 1,471,529 D.W.T.
1,920,251 D.W.T. 	1820	 874,486 D.W.T.
1,787,664 D.W.T. 	1830	 806,345 D.W.T.
3,271,146 D.W.T. 	1840	 1,144,257 D.W.T.
5,303,181 D.W.T. 	1850	 2,159,541 D.W.T.
8,030,802 D.W.T. 	1860	 3,569,094 D.W.T.
7,369,761 D.W.T. 	1870	 2,173,269 D.W.T.
6,102,051 D.W.T. 	1880	 1,971,603 D.W.T.
6,636,746 D.W.T. 	1890	 1,392,093 D.W.T.
7,747,258 D.W.T. 	1900	 1,225,193 D.W.T.
11,262,123 D.W.T. 	1910	 1,173,776 D.W.T.
13,306,556 D.W.T. 	1917	 3661,164 D.W.T.
25,027,342 D.W.T. 	1920	 15,692,631 D.W.T.

such steamship lines shall be given to persons who are citizens of the United States who have the support, financial and otherwise, of the domestic communities primarily interested in such lines if the Board is satisfied of the ability of such persons to maintain the service desired and proposed to be maintained, or to persons who are citizens of the United States who may then be maintaining a service from the port of the United States to or in the general direction of the world-market port to which the Board has determined that such service should be established: *Provided further*, That where steamship lines and regular service have been established and are being maintained by ships of the Board at the time of the enactment of this act, such lines and service shall be maintained by the Board until, in the opinion of the Board, the maintenance thereof is unbusinesslike and against the public interests: *And provided further*, That whenever the Board shall determine, as provided in this act, that trade conditions warrant the establishment of a service or additional service under Government administration where a service is already being given by persons, citizens of the United States, the rates and charges for such Government service shall not be less than the cost thereof, including a proper interest and depreciation charge on the value of Government vessels and equipment employed therein.

Although the Board, both on the operating and construction side, has always been keenly alive to the necessity of supplying the shipping needs for American foreign trade, it has acted indirectly, as no direct authority in this field had been conferred. Congress recognized the fact that the Board could not properly promote the American merchant marine and at the same time be indifferent to the movement of goods upon which the life of that merchant marine depends. Furthermore, the operation of a large fleet necessarily involves the establishment of foreign agencies and requires a continual conduct of business with foreigners engaged in commerce with this country.

The Board has long recognized the need of direct authority in the foreign-trade field, and the construction program has been undergoing thorough revision in order that the country may have a well-balanced fleet adapted to serve prospective commercial needs.

Various departments of the Shipping Board organization conduct extensive investigations which reveal trade opportunities and probable cargo movements. The matter of the establishment of trade routes and foreign agencies is given careful attention by the traffic department of the Division of Operations. The specific activities and general accomplishments of this phase of the Board's work are treated in other sections of this report.

#### THE DEVELOPMENT OF TRADE ROUTES.

The review of the development of trade routes by the Shipping Board, in order that it may be presented step by step and in its entirety, must begin with the close of the World War, and in the fol-

lowing exposition cargo services will be considered first; cargo and passenger services second.

#### **Cargo Services.**

On November 11, 1918, the day of the signing of the armistice, the Shipping Board controlled a fleet of 1,196 vessels, totaling 6,540,205 dead-weight tons, of American requisitioned, chartered neutral, and seized German tonnage. Of this number, 598 vessels, of 4,269,838 dead-weight tons, were in the direct service of the Army and Navy in carrying troops and supplies.

Immediately after the armistice the shipping problems of the Board were reversed. There were demands for the return of troops and European relief. The Government entered on a food program to relieve the stricken countries of Europe and to prevent, if possible, by the rapid supplying of foodstuffs, a deplorable economic and social condition which threatened to overwhelm those countries. This food-relief movement began in February, 1919. In May of the same year it reached its peak, at which time 264 vessels, of nearly 2,000,000 dead-weight tons, were so engaged.

However, at the same time, in addition to the demands of the Army and Navy and food relief, there was the problem of the unprecedented congestion, at seaboard and inland, of freight which had been delayed in shipment by the scarcity of vessels for commercial purposes. The American shippers, after four years of the World War, were quite at a loss to know how to get the physical means of moving exports.

The Shipping Board undertook to help in relieving this ocean freight situation just as soon as it possibly could. With the gradual fulfillment of the after-war requirements of the repatriation of our troops, and of the hauling of supplies and food, vessels became available for other fields of employment. The first step was the placing of these in trade routes which before the war had been of major importance. This policy was pursued for two reasons: First, here the congestion was most severe, and, second, the opportunity was at hand of gaining a permanent hold for the American flag in the principal services of the world.

As more and more vessels were gradually released from what may be termed the employment of the Government in its war program, the Board distributed these next among the trade routes of secondary importance. Then finally came the time when the amount of tonnage available for commercial use permitted of the establishing of new services where seldom before, if ever, our merchantmen had been seen except as occasional tramps. In this field of development the Board followed to a large extent the former routes of the Germans, from which in 1914 their ships had been driven. That this policy

was not adhered to exclusively, but that it was applied in a broader view for the enhancement of our merchant marine, without national or international discrimination or prejudice, becomes apparent when we review a summarization of the latest statistics on the growth and establishment of our comparatively new maritime industry.

On June 30, 1920, the United States Shipping Board had a total of 209 established general cargo berths, of which 202 were between United States and foreign ports and between United States ports, and seven between foreign ports. These various berths afforded shippers 229 services.

A further subdivision shows that of the 202 general cargo berths there were 100 from North Atlantic, 27 from South Atlantic, 54 from Gulf, and 21 from Pacific coast ports. Among these are many which are newly established.

As was previously stated, when vessels became available at the close of the war for other fields of employment the first step was the placing of these in the old-established trade routes. After this came the expansion to fields in which American merchantmen were practically pioneers. The Shipping Board inaugurated the first regular trans-Atlantic cargo line from Houston, Tex., when it began sailings from this port to Liverpool. Then, also, the steamship *Beatrice*, of 5,163 dead-weight tons, which sailed from New York on February 6, 1919, was the first steamer under the American flag which ever touched at the West Coast of Africa. The service since then has been maintained as a regular one, with an average of a sailing every 35 days for the 17 months. Furthermore, in order to strengthen the position of American vessels on this berth, where competition is, perhaps, keener than anywhere else, the Board has extended this service from the West Coast of Africa to the United Kingdom and return, with a regular schedule of sailings.

Among some of the other new general-cargo berths for American ships are the following:

- New York/South and East Africa.
- New York/East Coast of Africa via Red Sea.
- New York/India.
- New York/Dutch East Indies and Straits Settlements.
- San Francisco/Dutch East Indies and Straits Settlements.
- New York/Australasia.
- New York/Far East.
- Baltimore/Far East.
- Jacksonville/Far East.
- New Orleans/Far East.
- New Orleans/India.
- Pacific Coast ports/Far East.
- Pacific Coast ports/Australasia.
- San Francisco/East Coast of South America.

South Atlantic ports/East Coast of South America.  
 South Atlantic ports/West Indies.  
 Philadelphia/Far East.  
 Portland, Me./Antwerp.  
 Boston/Antwerp.  
 Boston/Constantinople and Black Sea ports.  
 Boston/Copenhagen and Gothenburg.

These might be carried still further if all the new services were to be enumerated. However, the expansion of the American merchant marine in services other than the old-established ones can, perhaps, best be briefly summarized by stating that the policy of the Board has been, as it still is, to favor the development of berths from those ports which formerly had few, if any, services.

In addition to the general-cargo berths from our home ports in which the American flag has become firmly established are the seven between foreign ports, first of which is that from the Far East to Europe, which was inaugurated in October, 1919, with a sailing of one vessel approximately every 30 days. The remaining foreign services are as follows:

*Mexican and West Indian ports/Europe.*—The first of a tentative program of approximately monthly sailings was begun on March 8, 1920, by the steamship *Major Wheeler*. This service will be of a protective nature to American trade in that it will afford the unusual opportunity for American steamship operators to determine in joint conference with competing lines under foreign flags the measure of transportation rates on manufactured and raw materials between foreign markets and Pan American countries in order to aid the United States exporters and importers in meeting competition in the Pan American markets.

*Plate/Europe (United Kingdom and French Atlantic-Hamburg range).*—This service consists at the present time of 6 refrigerator vessels which carry frozen products from the Plate to European ports.

*West Africa/United Kingdom.*—As previously stated, this berth is worked in connection with the New York/West African.

*Feeder services.*—These services, which are 3 in number, are maintained by a fleet of 9 vessels of an average of 3,500 deadweight tons each. One extends from Hongkong to Calcutta; the second from Shanghai south to Saigon; and the third from Shanghai north to Tientsin and Chefoo. The feeder boats carry the cargoes between the smaller ports in this range and the principal transshipment centers, at which the larger freighters call at regular intervals.

#### Cargo and Passenger Services.

On June 30, 1920, the Board had established two combination freight and passenger services, as follows:

*New York/East Coast of South America.*—Three vessels of a total of 25,680 dead-weight tons.

*New York/South and East Africa.*—One vessel of 8,500 dead-weight tons.

The remaining freight and passenger vessels are at the present time undergoing reconditioning preparatory to their being placed in regular runs. In addition, others are in the process of construction.

**Summary.**

In summary, the Shipping Board, on June 30, 1920, had a total of 209 general cargo berths and 2 passenger and cargo berths. The former give to shippers by American vessels 229 services. The fleet of the Board in operation, which makes possible the continuation of this program, now consists of 1,294 steel vessels of a total of 8,253,416 deadweight tons.

In the Division of Operations the needs of the various trades are given constant study, in order to provide full cargoes for our vessels whenever possible. The establishment of trade routes has been given careful attention. A more comprehensive statement is incorporated under Part III of this report.

**ESTABLISHMENT OF FOREIGN AGENCIES.**

The Shipping Board has been keenly alive to the necessity of establishing supervising foreign agencies. Such agencies were made necessary on account of the inability of the operators' agents to expedite the dispatch of vessels and to the prevalence of high-handed and questionable practices on the part of ship chandlers, stevedoring companies, and supply houses. In most foreign countries, notably Europe, governmental control over port and inland transportation is extensive, and operators' agents are unable to secure the cooperation of government officials who are indifferent to assisting private firms. It has been repeatedly demonstrated that these officials will cooperate with the Board's direct representatives.

Many shipmasters, away from direct contact with the home office, through carelessness and inexperience, do not give the Board's interest their best attention. It is difficult for foreign alien agents, even if willing, to control them. The knowledge of direct supervision close at hand acts as a check and improves the morale of the personnel afloat. Many of the Board's operators necessarily select agents without adequate knowledge of their experience or efficiency and have no check on them whatsoever. For this reason poor results could be excused without challenge. Supervision has stopped this practice and strengthened operators abroad.

Furthermore, it is evident that foreign alien agents can not be expected to render the same service to American shipping interests as to vessels flying the flag of their own nation, and if there be a conflict of interests the favor will, of course, go to their own ships.

For the purpose of relieving these conditions the Board in October, 1919, adopted a plan for the establishment of supervising foreign agencies. This supervision includes:

1. Expediting the turn around of Shipping Board vessels and assisting to obtain it.
2. Check on the necessity for and cost of repairs.

3. Check on purchase of supplies.
4. Check of efficiency of vessel personnel abroad.
5. Control of homeward cargoes to eliminate unnecessary competition.
6. Development of homeward business through operators' agents.
7. Report on the efficiency of operators' agents.
8. Report on matters generally affecting American interests.
9. Handling marine disasters, surveys, and legal difficulties.

In general, foreign representatives have the same authority and functions as those exercised by the district officers and agents of the Division of Operations in United States ports.

The organization provides four classes of representation :

1. General European office, controlling general and port agencies in continental Europe and the British Isles.
2. General agencies controlling port agencies for a district intended to cover all world's trades.
3. Port agencies in principal ports (except where general agents are established).
4. Special agencies (or representatives). Where business is light or operators have their own office, it is proposed to appoint as representatives American firms or individuals engaged in nonconflicting occupations, such as marine surveyors, who will supervise repairs and generally assist the operators.

Thus far agencies at the following places have been established :

<b>United Kingdom :</b>	<b>Italy—Continued.</b>
London.	Reggio and Calabria.
Liverpool.	Brindisi.
Manchester.	Bari.
Cardiff.	Aucona.
Fowey.	Trieste.
Hull.	Messina.
Newcastle.	Siracusa.
Falmouth	Palermo.
Glasgow.	Venice.
Dublin.	<b>Holland and Belgium :</b>
<b>France :</b>	Rotterdam.
Paris.	Antwerp.
Bordeaux.	<b>Denmark and Sweden :</b>
Havre.	Copenhagen.
Dunkirk, Dieppe, and Calais.	Gothenburg.
St. Nazaire and Nantes.	<b>Poland and Germany :</b>
La Rochelle and La Pallice.	Danzig.
Brest.	Hamburg.
Marseille.	<b>Finland :</b>
<b>Italy :</b>	Helsingfors.
Naples.	<b>Spain :</b>
Genoa.	Gibraltar.
Savona.	Barcelona.
Spezia.	<b>Egypt :</b>
Civitavecchia.	Port Said and Alexandria.

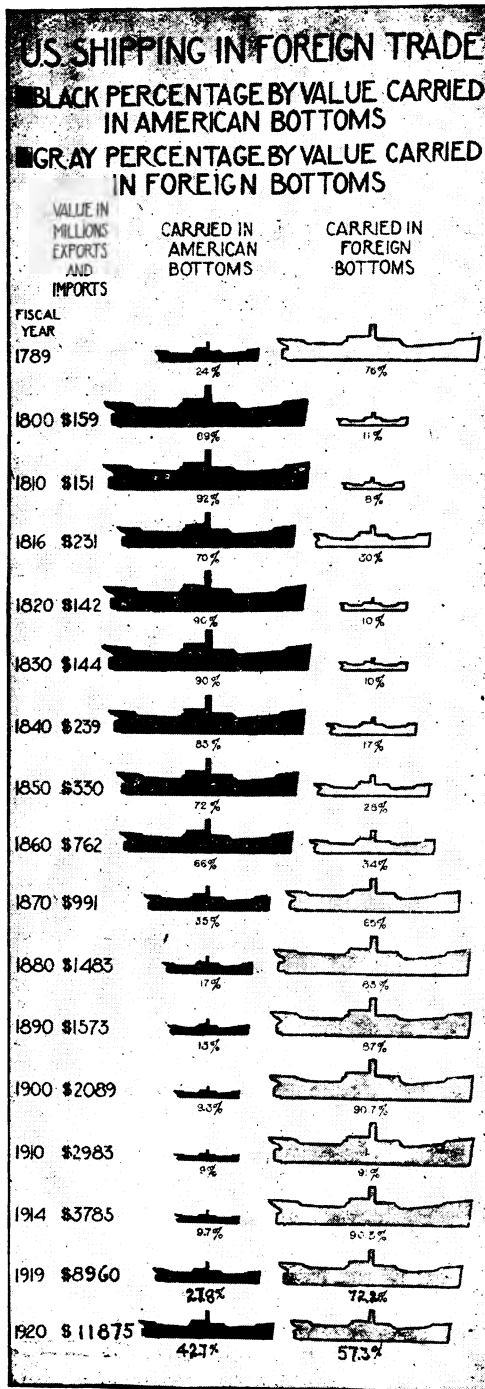


<b>Levant :</b>	<b>Azores :</b>
Constantinople.	Horta.
<b>Cuba :</b>	<b>Japan :</b>
Habana.	Yokohama.
<b>Bermuda :</b>	<b>China :</b>
Hamilton.	Shanghai.
<b>Brazil :</b>	<b>Philippine Islands :</b>
Rio de Janeiro.	Manila.
<b>Argentina and Uruguay :</b>	<b>Mexico :</b>
Buenos Aires.	Tampico.

The original agency plan provided, in addition to those already established, for agencies at the following places, the establishment of which is now under consideration :

<b>Spain (port agency) :</b>	<b>Africa (special agents) :</b>
Valencia (Almeira and Huelva).	West Coast (headquarters, Dakar).
Bilbao (Satunder and Corunna).	Capetown.
<b>Levant (port agency) :</b>	Durban.
Galatzz (Constanza).	Beira.
Batum.	Zanzibar (Mombasa).
Piraeus.	Tunis (Bizerta).
Salonika.	<b>Oceania (special agents) :</b>
Nonorissisk.	Sydney.
<b>Germany (port agency) :</b>	Auckland.
Bremen.	Melbourne.
Wilhelmshaven (Kiel Canal).	<b>South America :</b>
Stettin.	Port agencies—
<b>Scandinavia (port agency) :</b>	Valparaiso (possibly general
Reval.	agency).
Malmo.	Callao.
Stockholm.	Iqueque (nitrate ports).
Bergen and Christiania.	Special agent—
<b>Orient (special agents) :</b>	Guayaquil.
Hongkong.	<b>Miscellaneous :</b>
Vladivostok and Dalny.	St. Thomas.
Calcutta.	Trinidad.
Salgon.	
Bombay.	
Dutch East Indies.	

In addition to the establishment of direct agencies, encouragement has been given to American firms who upon their own initiative and capital have opened offices abroad. Where such firms are established with adequate facilities and capable of rendering efficient service the Board has directed the consignment of its vessels to them for handling. It is hoped and confidently expected that the Board's agencies abroad will be instrumental in developing such agencies under the control and management of American citizens, who, in addition to their own pecuniary advancement, will give preferential treatment to American vessels in securing return cargoes, economical administration in the matter of port charges, and expeditious dispatch.



## DIVISION OF REGULATION.

**History of the Division of Regulation.**

A primary purpose of the shipping act, 1916, as announced in its preamble, was "to regulate carriers by water engaged in the foreign and interstate commerce of the United States." The duty imposed upon the Board in this respect is mandatory. Consequently, one of the first functions which the Board prepared to exercise was that of regulation, and the Division of Regulation was created in May, 1917, as the instrumentality for enforcing the regulatory provisions of the act.

The division immediately compiled the necessary information regarding water carriers operating in our domestic and foreign commerce to permit the determination of their status under the regulatory sections. The division then drafted tentative regulations to govern the publication, posting, and filing of rates by the interstate water carriers, foreign carriers not being required by the act to file such records. Carriers in our domestic as well as in foreign commerce and other persons subject to the act were then directed to file with the board the traffic contracts and other agreements mentioned in the fifteenth section of the shipping act, 1916. Rules of practice to govern proceedings instituted under section 22 of the act were also prepared by this division and adopted by the Board. At this juncture the entrance of the United States into the World War necessitated the concentration of the Board's effort upon the building and operation of vessels, submerging for the time being its regulatory activities. Even during the emergency, however, a strong effort was made to maintain the records of the office and gather all pertinent information. Following the armistice the division again renewed its regulatory activities, and since that time the work has steadily increased in volume.

**Rate Functions of Division of Regulation and Division of Operations Distinguished.**

Some confusion or misunderstanding prevails as to the rate-regulation work carried on by the Division of Regulation and the rate-making or rate-controlling work performed by the Division of Operations. It is important, therefore, to clarify these jurisdictional differences.

The Division of Regulation deals exclusively with common carriers by water in the domestic and foreign commerce of the United States. Its functions are quasi judicial. The shipping act leaves with the common carriers the right to initiate rates, which, however, in respect of interstate carriers, must be published, posted, and filed in accordance with regulations prescribed by the Shipping Board. If shippers feel that any rates so filed are unduly discriminatory, ex-

cessive, unreasonable, or otherwise in violation of the shipping act, 1916, they may file with the Board under section 22 of the act a sworn complaint setting forth their grievance and praying for corrective action by the Board and reparation for damages sustained. After all necessary pleadings are filed the division holds an open hearing at which both sides are allowed to present evidence and cross-examine witnesses. If upon the facts proved it appears that the rates are unduly discriminatory or unreasonable, the carrier is directed by formal order of the Board to adjust its rates in such a manner as to correct the evil found to exist. It will thus be seen that the division in no sense can be said to be making rates, but is merely acting as a judge of the rates made directly by the carriers.

While the Division of Operations was engaged extensively in operating vessels directly, it maintained a rate-making section, the function of which was to actually determine and make the rate which should be charged shippers. Since the Shipping Board vessels have been operated by private interests, the Division of Operations, through its agreement with the operators and its power to allocate vessels, maintains a large measure of control over the actual rates to be exacted by the operators. The operators engaged in a particular trade organize what may be termed a steamship conference, the chairman of which is a representative of the Division of Operations. They meet at stated intervals and fix the rates to be paid by the shippers. The rates so fixed are, of course, liable to attack by shippers on the ground of unreasonableness or undue discrimination, in which event the Division of Regulation would pass upon them as indicated in the preceding paragraph. It is therefore manifest that the rate functions of the Division of Regulation and the Division of Operations are widely different.

#### **Carriers' Conferences and Contracts.**

One of the principal activities of the Division of Regulation during the past year has been the handling of carriers' conferences, contracts, agreements, and understandings in respect of rates, traffic, pooling of equipment, or traffic and other working arrangements filed under the provisions of section 15 of the shipping act, 1916. Owing to the constantly changing conditions in the shipping world, this branch of the work of the Division of Regulation is assuming large proportions.

At the end of the fiscal year there were on file in this office 33 conferences. These conferences are, in the main, organizations of steamship companies designed primarily to cooperate in such manner as to prevent destructive competition, under which function various subconferences, or, as designated in certain regions, trade conference groups. In one instance, Gulf Shipping Conference

(Inc.), there are 14 subsidiary conferences or trade groups. Most of these conferences hold weekly meetings, at which matters of vital interest to the particular trade are discussed and definite action taken. The filing and analyzing of the minutes, tariffs, and other conference papers in order to determine whether or not they are in contravention of the existing law is a task which is not only difficult but one which must be kept strictly up to date in order to be effective. It should be remembered that a large percentage of the new conferences being filed with the Board are a direct result of the Shipping Boards' participation in the coastwise and foreign trade of the United States. The carriers forming the new conferences are all American, although they operate on the same plan as the foreign line conferences which have been established for many years.

The carriers' contracts which were filed prior to and during the war and which lay practically dormant in the files until the beginning of last year have all been brought up to date. Many of the contracts were found to be canceled or superseded by new ones. There are at the present time 194 contracts on file.

#### **Formal Docket.**

The formal docket embraces proceedings under section 22 of the shipping act, bringing into issue rates, regulations, and practices of common carriers subject to the jurisdiction of the Board.

#### **Informal Docket.**

During the past year 42 complaints were placed upon the informal docket of the Division of Regulation under the provisions of article 24 of the rules of practice in proceedings under the shipping act. Shippers complained against rates and practices of carriers operating in both our foreign and domestic commerce. The nature of the complaints were various; such, for example, as the exaction from shippers of rates not legally on file with the Board, the wrong classification of articles of commerce, embargoes, damage to goods in transit, and refusal to accept shipments when tendered. The complaints were taken up with the carriers by correspondence or conference, and in the majority of cases were adjusted in favor of the shippers. Others proved to be unfounded and the carriers without fault. Pending cases are being steadily brought to a point where they can be disposed of to the satisfaction of all parties concerned.

#### **Deferred Rebates.**

A very important section of the shipping act is section 14, now strengthened by section 20 of the merchant marine act, 1920, which prohibits the use of deferred rebates or the indulgence in other unfair practice in respect of our export or import trade.

A deferred rebate is defined by this section as "a return of any portion of the freight money by a carrier to any shipper as a con-

sideration for the giving of all or any portion of his shipments to the same or any other carrier, or for any other purpose, the payment of which is deferred beyond the completion of the service for which it is paid, and is made only if during both the period for which computed and the period of deferment the shipper has complied with the terms of the rebate agreement or arrangement."

The granting to shippers of deferred rebates by steamship conference lines has in the past worked great injury to the American merchant marine. Since the passage of the shipping act 11 deferred rebate cases have been handled by this division. The practice was alleged to obtain in connection with trade between the United States and Venezuela; between the United States and Haiti; between the United States and Trinidad; in the Philippine Islands trade; between the United States and the West Indies; and between the Orient and Europe and South America and Europe.

Investigations developed that in some cases the facts were not sufficient to establish a violation of the shipping act, as the traffic moved between exclusively foreign ports. However, the merchant marine act has extended the scope of the deferred rebate section so as to make it applicable to deferred rebates granted in foreign commerce under certain circumstances. In other cases it appeared that the alleged offenders had issued or were about to issue a deferred rebate circular which would give to shippers who patronized their lines exclusively for a period of at least six months, quite a substantial rebate on the freight charges. Prior to the expiration of the six months this division caused the carriers to revoke such circulars, as a result of which no deferred rebates were paid. The carriers were strongly admonished that any infraction of the law in the future would subject them to the penalty of the statute. Only three deferred rebate complaints are now under investigation.

#### Tariffs.

The checking, analyzing, and filing of tariffs submitted by the interstate water carriers subject to the Board constitutes a large part of the work of the division. During the year 1,452 new tariffs were received, checked, and filed. These tariffs show rates on the Atlantic, the Gulf, and the Pacific coasts, as well as the Great Lakes; also to Porto Rico, Canal Zone, Hawaii, Alaska, and the Philippines.

A duplicate tariff file is maintained in the division. This file is kept up to date and is open to public inspection at any time. This privilege is being taken advantage of by representatives of various shippers and persons directly interested in water-borne commerce.

Regulations for the publication, posting, and filing of tariffs with the Board were compiled and issued in a pamphlet entitled "Tariff Circular, No. 1," effective April 30, 1920. Since that date, common

carriers by water in interstate commerce subject to the jurisdiction of the Board have been required to file their tariffs in accordance with said regulations.

At the present time 99 interstate water carriers are filing tariffs, which represents an increase of 40 over those filing during the previous year. In addition, 10 tariff agencies are submitting tariffs.

**General.**

A very important feature of the work of this division has been the compiling of data gathered by means of General Circular No. 2. This circular was first issued in 1917, and it has been revised several times. In its present form it is a complete questionnaire as to the operations of steamship companies, and from the information submitted thereon the Division of Regulation is able to tell whether or not the operations of a steamship company come within the purview of the shipping act. A large number of companies have been circularized and each of them placed in one or more of 10 classes.

A tabulation of the above-mentioned classes of steamship lines is as follows:

1. Water carriers whose services have been discontinued.....	152
2. Interstate water carriers operating on rivers, lakes, or oceans.....	106
3. Water carriers operating in interstate commerce on the inland waters of the United States, either river, lake, or canal (excluding the Great Lakes).....	69
4. Water carriers operating towage, lighterage, or ferrillage service.....	62
5. Water carriers engaged in interstate tramp service.....	117
6. Water carriers engaged in foreign tramp service.....	115
7. Water carriers subject to the jurisdiction of the Interstate Commerce Commission.....	29
8. Water carriers operating on regular routes in interstate commerce on the high seas or Great Lakes, subject to jurisdiction of the Shipping Board.....	99
9. Water carriers operating on regular routes in foreign commerce of the United States, subject to jurisdiction of the Shipping Board.....	165
10. Water carriers conducting an exclusively proprietary service.....	69

An examination of the above tabulation discloses that a very small proportion of the water carriers operating in our commerce are subject to the regulatory jurisdiction of the Board.

**Merchant Marine Act, 1920.**

The merchant marine act leaves the regulatory sections of the original shipping act intact, but reinforced in several particulars. In respect of deferred rebates the Board may, after full hearing, determine whether a person not a citizen of the United States and engaged in transportation by water of passengers or property has violated any provisions of section 14 of the shipping act, or is a party to any arrangement involving in respect to water transpor-

tation between foreign ports the granting of deferred rebates or indulging in other unfair practices, which arrangements exclude from admission upon equal terms with other parties a common carrier by water which is a citizen of the United States. If the Board finds said section to have been violated, it must certify such fact to the Secretary of Commerce, who shall refuse entry into any port of the United States or its possessions of a vessel owned, operated, or controlled directly or indirectly by the offending party. The new act, with exceptions therein stated, makes it unlawful directly to transport merchandise between points of the United States, including districts, territories, and possessions embraced within the coastwise laws, in any other vessel than a vessel built and documented under the laws of the United States and owned by a citizen of the United States.

It also enables the Board, through the Interstate Commerce Commission, to cause the establishment of preferential rail rates to be enjoyed on traffic moving from interior points of the United States to a port and thence to a foreign country, provided the ocean portion of the transportation is handled by an American vessel.

#### PORT FACILITIES COMMISSION.

In November, 1919, the Board definitely decided to retain the Port Facilities Commission in an advisory capacity. At that time negotiations were conducted and arrangements made with the Board of Engineers for Rivers and Harbors of the War Department, for the continuation of that portion of the Port Facilities Commission's work pertinent to our home ports. The valuable files of the Port Facilities-Commission were loaned to the Rivers and Harbors Board, which has continued the port facilities work.

In consequence of this arrangement, the work of the Port Facilities Commission of the Shipping Board, since December, 1919, has been merged gradually into similar work of the Board of Engineers for Rivers and Harbors of the War Department.

Previous to December, the principal activities of the commission were as follows:

The Chief of Engineers of the Army having requested the commission to review a proposition for a combined port and railway passenger terminal in harbor district No. 3 at Chicago, Ill., a study of this subject was made and a comprehensive report submitted.

The Navy Department having proposed a joint naval repair station and overseas terminal at the Bayonne, N. J., tide flats in New York Harbor, a study of this subject was made and plan prepared outlining a suggested scheme for economical operation. Somewhat later the subject of an overseas terminal at Jamaica Bay, Long



Island, having been suggested, an outline plan of this development was prepared and map drawn showing proposed railroad belt and tunnel connection between Bayonne and Jamaica Bay.

Studies were made with regard to proposed commercial utilization of the Army overseas bases at Philadelphia, Norfolk, and New Orleans.

A study was made and report submitted with reference to the utilization of the ports of Portland, Me., and Boston, Mass., for overseas commerce.

A complete voyage of a Shipping Board vessel was analyzed with a view to a determination of the economy which would be effected by the more rapid turn around of vessels in port. This study developed the fact that a close supervision of the operations in port of each vessel would undoubtedly result in material economy, and it was shown that had the period in port of the particular vessel in question been cut down to a reasonable number of days the savings would have been large. The analysis was made in great detail, and is believed to be worthy of study at this time.

In general connection with the Chicago terminal study, statistics were collected with reference to freight traffic handled, rail and lake separately, and to the port facilities of the principal ports situated upon the Great Lakes.

Tables were prepared showing dimension data with regard to available graving docks, floating dry docks, and marine railways, together with location and ownership, in the ports of the United States. A study was also made with regard to dry-dock facilities necessary for the merchant marine upon the completion of the Shipping Board program.

Compilation of data pertaining to the characteristics and facilities of our domestic ports was continued, as was also the preparation of maps showing in each case the location and nature of the various port facilities.

A study of methods for handling miscellaneous cargo was continued and expanded to include the transfer between rail and water on inland waterways, with especial reference to such streams as the Ohio and Mississippi Rivers, which have a wide range of water level.

Information was compiled regarding exports and imports of the principal ports of the South Atlantic seaboard. A separate compilation was made with regard to manufactured, mineral, agricultural, and lumber productions in these States.

A study was made with regard to exports and imports interchanged through Pacific coast ports between the United States and the Orient.

One requirement of the merchant marine act, 1920, is that the Shipping Board, in cooperation with the Secretary of War, shall promote and develop ports and transportation facilities in connection

with water commerce. The Chairman of the Shipping Board has therefore appointed a representative of the Board to join in a conference with representatives of the War Department to work out a plan of joint operation. A preliminary meeting has been held with the Chief of Engineers and the Chief of Transportation Service of the War Department, and it is believed that a plan will be formulated at once which, while avoiding duplication of effort on the part of various departments of the Government, will reduce the expense of collecting the necessary statistics.

#### DIVISION OF INDUSTRIAL RELATIONS.

At the beginning of the year just closed labor problems arising in connection with vessel operation were under the supervision of the Marine and Dock Industrial Relations Division, whereas questions respecting ship construction were handled by a staff of the United States Shipping Board Emergency Fleet Corporation, having headquarters at Philadelphia. November 20, 1919, the Shipping Board, by resolution, consolidated the two departments into one organization and changed the name of the Marine and Dock Industrial Relations Division to the Division of Industrial Relations. Shortly afterwards there was a physical merging of the two offices, and the whole work is now carried on from headquarters at Washington.

#### Marine Labor.

The number of men required to man the vessels actually owned and controlled by the Shipping Board on June 30, 1920, was approximately 60,000. During the war the Washington organization, now known as the Division of Industrial Relations, felt responsible for the maintenance of industrial peace not only on Shipping Board vessels but on the whole body of American shipping, in so far as it was needed to help win the war. To assist the Shipping Board in this task the private steamship owners and the marine labor unions on the Atlantic and Gulf coasts voluntarily delegated to the Shipping Board authority to establish such wage rates and working rules as the Board might deem fair, said awards to be binding on both sides. With the coming of peace, however, and especially after the return of the American expeditionary force to the United States, it was felt that the Shipping Board should no longer attempt to fix standards for privately owned vessels, but that, on the contrary, it should on its own vessels follow such rates and standards as might be worked out by private agreement between the American vessel owners and the maritime workers.

In the main the Shipping Board has adhered to this policy during the past year and devoted its chief attention to the many concrete problems which have risen in connection with the operation of its

own fleet of vessels. At the beginning of the year and again at the close it did, however, use its good offices to help bring together the private shipowners and the unions to the end that agreements might be worked out which would be satisfactory to all parties and give stability to labor on board ship. Similarly at other times the Division of Industrial Relations has worked to bring about a better understanding on controverted questions. It was largely due to prolonged educational effort on the part of the Shipping Board that in the new agreements with the Atlantic and Gulf sailors', firemen's, and cooks and stewards' unions effective May 1, 1920, provision is made for a grievance committee which will interpret the agreements and try to prevent the small but troublesome misunderstandings which always arise from assuming serious proportions. By participating in the May 1, 1920, agreements the Shipping Board has obtained the pledge of the unlicensed seamen to work another year at the previous wage rates. New agreements have also been entered into fixing the wages of seamen sailing from the Great Lakes to the ocean. The old agreements with the licensed officers had not yet expired by June 30, 1920, nor had any of the agreements for the Pacific.

During the year there has been one great marine strike. Beginning about July 8 and ending about July 26, 1919, practically all vessels entering Atlantic and Gulf ports were held up by a strike of seamen and (during the last few days) of marine engineers. The strike started because of a dispute regarding union preference and was ended by wage advances ranging around 20 per cent, the scale then established being the one still in force. The only other marine strike was that of engineers on ocean-going towboats, who struck in support of a demand for a third engineer. This strike failed. After these strikes the tendency has constantly been toward more amicable relations between vessel owners and seamen.

The Director of the Division of Industrial Relations has represented the Shipping Board on the navigation laws revision committee, which has laid before the Shipping Board a number of recommendations regarding alterations or additions to the navigation laws.

#### **Longshore Labor.**

While the war was in progress the wages and working conditions of longshoremen at most of the ports of the United States were fixed by the National Adjustment Commission, a body made up of representatives of the Shipping Board, the International Longshoremen's Association, and the private employers of longshore labor. For some months following the armistice this arrangement was continued by mutual consent, and then in September, 1919, the National Adjust-

ment Commission was formally reconstituted on a peace-time basis. The September, 1919, agreement did not, however, include any ports on the Pacific coast, nor has the commission under the new agreement jurisdiction over the Great Lakes, except by special submission. The commission's jurisdiction over coastwise longshoremen is limited to a few lines, and covers only North Atlantic ports. Following the return of the railroads to private ownership, March 1, 1920, the commission was no longer a very large factor in the coastwise situation. At the close of the year the chief longshoremen, coming under the National Adjustment Commission, were therefore the deep-water longshoremen at the various Atlantic and Gulf ports, which was never fully organized under the commission, not being included.

The 12 months just ended have been filled with an exceptional amount and variety of longshore labor difficulties, both in the case of longshoremen coming under the National Adjustment Commission and in the case of those without its jurisdiction. The national officers of the International Longshoremen's Association, the organization with which the Shipping Board and longshore employers had entered into the agreement to set up the National Adjustment Commission, have been thoroughly faithful and exceptionally energetic in striving to give effectiveness to the awards of the commission, and in the end they have in every case succeeded in compelling acceptance. But following the issuance of the October, 1919, deep-sea award for New York (granting a 5-cent advance) the association was unable to prevent a serious strike of its members, which in New York and New Orleans tied up shipping operations for about one month.

Of the longshoremen not coming under the National Adjustment Commission there have been serious and usually protracted strikes at San Francisco, Seattle, Philadelphia, and the coastwise longshoremen at Atlantic and Gulf ports, the causes varying in each instance, but usually being closely associated with radical agitation.

The director of the division has conducted a personal investigation of the longshore, and also the shipyard labor, disputes at San Francisco and other Pacific ports.

#### **Ship Construction and Repair.**

Throughout all except the first three months of the year just closed the Shipping Board has adhered to a program of leaving to the ship-construction and ship-repair yards as complete liberty as possible in the administration of their own labor policies. At the beginning of the year the Emergency Fleet Corporation, continuing the policy introduced during the war, was still enforcing through an administrative staff the provisions of the last award of the Shipbuilding Labor Adjustment Board, dated October 1, 1918. This

policy of administrative enforcement was terminated October 1, 1919,

and a few weeks later the district representatives of the Emergency Fleet Corporation charged with the administration of labor matters were discontinued.

Although the details of labor administration were by this step turned back to the yards in a very complete manner, it has not been possible for the Shipping Board to avoid laying down some general policies touching those aspects of the labor question which affect directly the Board's own interests. A large portion of the ship-construction contracts have been on a cost-plus basis, and on these contracts the actual burden of any increased wage costs would inevitably fall on the Shipping Board, and through the Board on the country at large. The Shipping Board therefore could not avoid the responsibility of preventing any undue increase in wages on ship construction. The general attitude of the Board has been that the rates fixed by the Shipbuilding Labor Adjustment Board in its last award were fair rates and that it would not be warranted in approving of further increases. On September 30, 1919, the Chairman of the Shipping Board announced the following policy:

The United States Shipping Board Emergency Fleet Corporation takes the position that, following the policy announced by the President, no increase be authorized over the Macy scale, which is continued in effect after October 1, unless a change is authorized after the White House conference; and if shipbuilders in the meantime put any increase into effect it must be understood that they do so at their own cost, and that the Emergency Fleet Corporation will not, directly or indirectly, assume or pay any part of such increase.

The policy laid down in this announcement has been followed consistently through the year, and for the most part with success, though not before the position of the Board had been tested out by a number of strikes. The restrictions on wage advances being confined to cost-plus yards, the Shipping Board did not interpose any obstacle to an 8-cent advance on each classification agreed to by the lump-sum yards in the Northwest. The advance in the lump-sum yards around Puget Sound had a disquieting effect on the cost-plus yards at San Francisco, with the result that there was a strike involving about 35,000 men, which lasted from October 1, 1919, to December, 1919. Later there were a number of shorter and less serious strikes in other localities. These strikes were ended by the men returning to work at the former rates. At the close of the year, June 30, 1920, a repair-yard strike at New Orleans remained unsettled.

Notwithstanding these strikes and many requests for changes in specific rates, the men in the shipyards have shown that they are, on the whole, satisfied with the extension of the rates of the Shipbuilding Labor Adjustment Board down to the present time, particularly in view of the support which the attitude of the Shipping

Board has carried against any wage decreases. Since May, 1920, a committee appointed jointly by the Shipping Board, the Navy Department, and the American Federation of Labor has been investigating the situation in ship-construction yards.

The construction program of the Shipping Board is now nearing completion, the number of shipyard employees building vessels for the Emergency Fleet Corporation having decreased from 289,594 on July 1, 1919, to about 75,000 on June 30, 1920. An important phase of the work of the Division of Industrial Relations as affecting ship construction has become the interpretation of the awards of the Shipbuilding Labor Adjustment Board in their bearing on the reimbursement of yards for wage advances. The Division of Industrial Relations maintains a representative on the Wage Reimbursement Committee, and is also engaged in a codification of the awards, ruling, and interpretations of the Macy Board.

#### SHIP SALES DIVISION.

The Ship Sales Division functions under the direction of the Shipping Board, and all matters pertaining to the sale of vessels are submitted to the Board for action before a sale is finally consummated. In order that the Board may be in possession of all facts in connection with the proposed sale of any vessel it is necessary for the Ship Sales Division to establish the financial responsibility of the purchaser, also his ability to carry out his contract for purchase; whether or not the proposed form of insurance will properly protect the Board against loss by accident or fire, or any other contingency which might arise which would imperil the interests of the Board in that particular vessel.

There were inaugurated during the year three distinctly separate policies which had for their purpose the sale of ships by the Shipping Board, namely:

1. *Deferred-payment plan.*—Twenty-five per cent cash on delivery, 12½ per cent in 6 months, 12½ per cent in 12 months, balance in equal semiannual installments of 6½ per cent extending over a period of four years, with interest at 5 per cent per annum.

2. *Charter-purchase plan.*—Two and one-half per cent of purchase price deposited with offer, payments of \$8.30 per deadweight ton per month, payable in monthly installments in advance. After payments have reached 50 per cent of the total value of the vessel plus 5 per cent interest on deferred payments, title to pass to purchaser. Deferred payments for balance, with interest at rate of 5 per cent per annum, to extend over period of five years from date of contract, payable in equal semiannual installments.

3. *Charter-purchase plan of April 8, 1920.*—Five dollars per deadweight ton per calendar month in advance, commencing on and from the day of the delivery, and at and after the same rate for any part of a month; the hire to continue until the delivery of the vessel in good order and condition to the owner.

The activities of this division in conducting its regular business accomplished the sale of the 426 ships, aggregating approximately 2,195,440 deadweight tons. The various classes and the sales value are shown in the following table:

*Ship sales as of June 30, 1920.*

	Number of vessels.	Dead-weight tons.	Sales value.
<b>New steel vessels:</b>			
Cargo.....	131	820,761	\$132,643,393.70
Refrigerator.....	3	25,553	5,539,607.71
Freight and passenger.....	2	10,660	3,283,000.00
Passenger.....	2	8,610	2,250,000.00
<b>Reconveyances (steel):</b>			
Cargo.....	33	267,248	32,227,633.73
Tankers.....	37	385,592	50,552,290.68
Passenger.....	2	9,972	1,690,372.66
<b>Reconstruction lakers (cargo):</b>	27	100,201	4,642,104.12
<b>Ex-Austrian (steel):</b>			
Cargo.....	5	29,588	4,099,082.50
<b>Ex-German (steel):</b>			
Cargo.....	33	191,676	24,233,491.00
Passenger.....	4	20,402	750,000.00
Freight and passenger.....	1	2,620	300,000.00
Sallers.....	6	22,197	1,220,885.00
Tugs.....	1	.....	21,000.00
<b>Wood vessels:</b>			
Cargo—			
New.....	34	150,576	7,095,352.21
Old.....	1	2,700	10,000.00
Wrecks.....	3	10,828	35,631.00
Barges.....	45	88,416	2,395,400.00
<b>Composite vessels (cargo):</b>	6	20,850	1,085,000.00
<b>Concrete vessels (tanker):</b>	1	7,000	700,000.00
<b>Tugs:</b>			
Wood.....	22	.....	1,744,400.00
Steel.....	27	.....	3,396,000.00
Total.....	426	2,195,440	279,914,594.31

#### LEGAL PROBLEMS INVOLVED IN THE SALE OF SHIPS.

In connection with the work of the Ship Sales Division, the Law Department has been called upon to prepare various forms of contracts under which the Board has sold and leased vessels. The first agreement prepared was the 25 per cent deferred-payment plan. This plan necessitated the preparation of a purchase agreement and vessel mortgage.

The next plan adopted by the Board was known as the charter-purchase plan, the first series of this agreement calling for \$8.30 charter rate and the second series for \$5 charter rate. Several charter parties covering various modifications of the foregoing plans to meet the requirements of special cases have also been prepared.

A vessel mortgage was prepared which was a consolidation and modification of the purchase agreement and mortgage used in connection with the 25 per cent purchase plan, which form has now been revised to meet all the requirements of the ship-mortgage act, 1920.

Besides preparing the standard form agreements, the Law Department has prepared the various documents necessary in connection with the consummation of the 426 sales made during the past fiscal year.

The Law Department has been also called upon to render decisions construing the various features of the shipping act in connection with the sale and transfer of vessels to foreign registry and to pass upon various financial questions involved in sale of vessels, these questions arising principally in connection with guarantees and bonds required in connection with sales of vessels to foreigners.



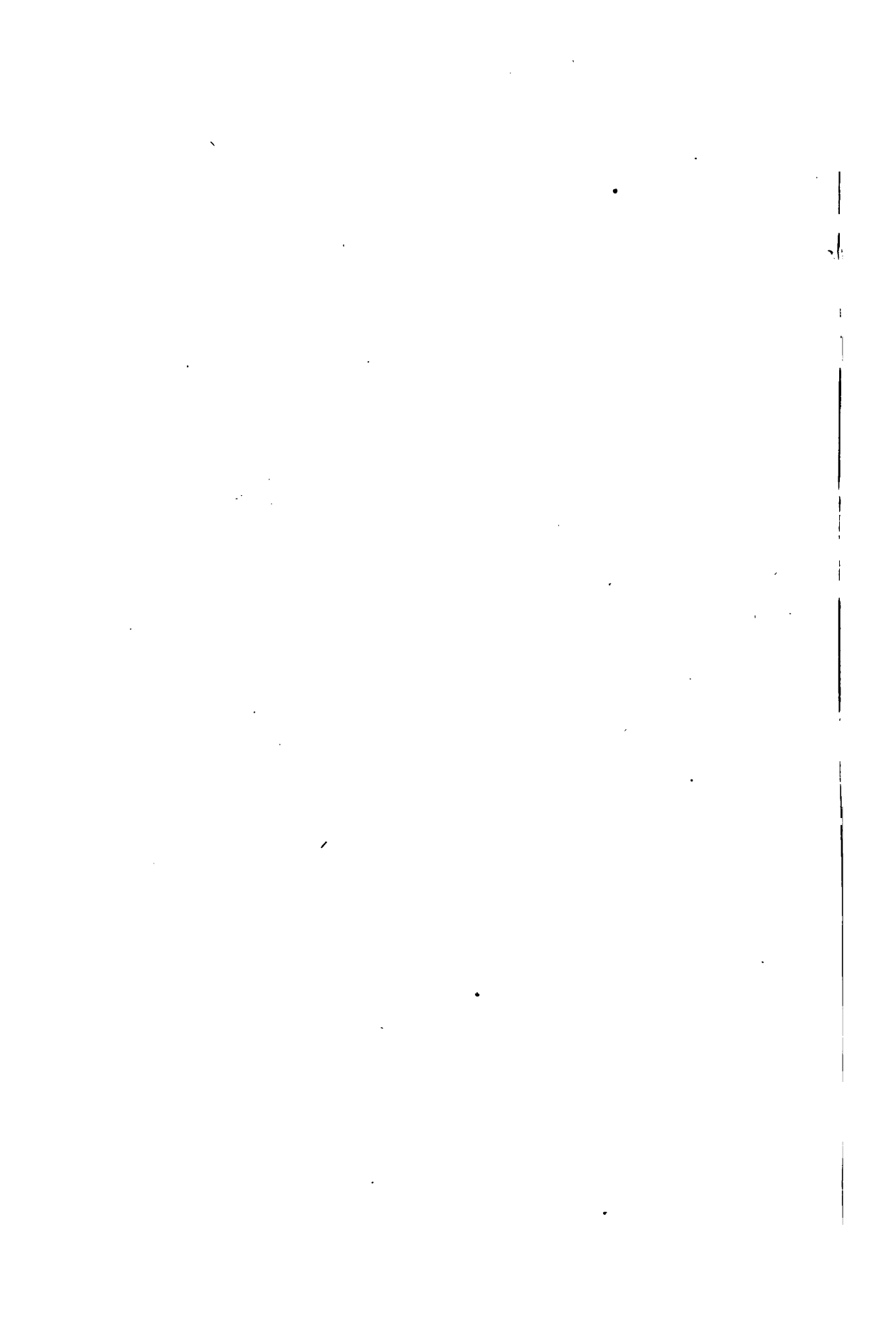
---

---

**UNITED STATES SHIPPING BOARD  
EMERGENCY FLEET CORPORATION**

—  
**Division of Construction and Repairs**  
—

**PART II**



## **II. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF CONSTRUCTION AND REPAIRS.**

### **CONSTRUCTION DEPARTMENT.**

On account of the early completion of the shipbuilding program and the policy adopted shortly after the signing of the armistice to reduce activities to a peace-time basis, it has been possible to effect a reorganization of the Corporation which represents a great saving in expenditures for administration. The rapid increase in the personnel during 1917 and 1918 was followed by a corresponding decrease in the number of employees during the entire fiscal year 1920, and it may be stated that the promptness which characterized this effort to diminish the volume of war expenditures has produced highly gratifying results with no impairment of efficiency.

Resignations from the Board and the Corporation caused changes during the year in the membership of the board of trustees which, on June 30, 1920, was composed of the following officials: W. S. Benson, president; John A. Donald, vice president; John Barton Payne; Martin J. Gillen.

After the resignation on March 1, 1920, of J. L. Ackerson, vice president in charge of construction, and the appointment of R. L. Hague as Director of the Division of Construction and Repairs, plans were adopted to consolidate these two branches of the work, which up to that time had been conducted independently, and the reorganization had been completed by June 30, 1920, without causing interruption to the construction program or the repair work.

The remarkable production records of the first half of the year 1919 were surpassed in the succeeding months. During September, 1919, the Division of Construction delivered 150 ships of over 3,000 deadweight tons each, representing a total of 810,386 tons. Prior to 1917 the maximum yearly output of ships in the United States was in the year 1908, when 1,457 vessels, of 921,324 deadweight tons, including all vessels of 5 net tons and over, were built; of steamships alone the total was 722,436 deadweight tons. Considering ocean-going vessels, the output for the month of September, 1919, has greatly exceeded maximum prewar deliveries for an entire year. These results were obtained, moreover, without overtime work or the payment of bonuses. Compared with the average annual construc-

tion of 476,092 dead-weight tons from 1890 to 1916, inclusive, the contrast is more striking.

Early in the history of the Corporation much difference of opinion existed as to the volume of tonnage which could be built in one year. It was generally believed, however, that at least 2,000,000 dead-weight tons would be delivered in 1918 and 5,000,000 dead-weight tons in 1919. As the maximum construction in Great Britain had never exceeded 3,000,000 tons, these estimates were considered the peak of accomplishment. The actual results far exceed the expectations, as shown by the following schedule:

*Deliveries of finished ships by Emergency Fleet Corporation.*

Year.	Number.	Tonnage (dead weight).
1917.....	50	305,215
1918.....	533	3,030,406
1919.....	1,180	6,379,823

The net program as of June 30, 1920, contemplates 2,315 ships of 13,675,711 dead-weight tons. The proportions of this program can be more readily understood when described in familiar terms, as follows:

If all vessels on the program were placed in a straight line, stem to stern, they would extend for a distance of 158 miles, and if steaming a mile and a quarter apart would reach from New York to Southampton, England.

The total dead-weight tonnage is equal to the carrying capacity of 388,363 freight cars loaded 35 tons per car.

A total of 4,593,000 horsepower is generated by the propelling machinery.

For the transportation of the hull steel alone 115,000 flat cars would be required.

For manufacturing the rivets used a rod of steel three-fourths inch in diameter and 37,500 miles long would be necessary. This rod would extend once around the earth at the Equator and sufficient would remain to make a three-strand fence from New York to San Francisco.

Rapid progress toward the completion of the program is shown by the production record on June 30, 1920, as follows:

	Number.	Tonnage.
Keels laid.....	2,289	13,380,811
Ships launched.....	2,194	12,511,036
Ships delivered.....	2,070	11,622,361

The unfinished work on that date is set forth in the following schedule:

	Number.	Tonnage.
Keels to lay.....	26	294,900
Ships on ways.....	95	869,775
Ships outfitting.....	124	888,675

The United States now occupies second place in the world's shipping, and on completion of the Corporation program will probably have as much ocean-going tonnage as all the other countries combined, with the exception of Great Britain. On June 30, 1920, the entire sea-going merchant marine of ships over 750 dead-weight tons in capacity represented 3,404 vessels, of 16,918,212 dead-weight tons, not including over 2,000,000 tons of shipping on the Great Lakes.

The effect of the shipbuilding program upon our shipping is clearly shown in our increased share of the carrying trade of the world. In 1914 commodities to the value of \$368,359,756 were carried in our own ships, representing 9.7 per cent of our water-borne foreign trade. In the fiscal year ending June 30, 1920, this percentage was increased to 44.8 per cent, and the value of the imports and exports carried in American bottoms amounted to \$5,071,905,981. This exceeds by far the total value of our water-borne foreign trade in 1914, representing \$3,785,468,512. An industry of immense proportions has been established.

During the year many changes in the organization were adopted which removed from the jurisdiction of the Construction Division the following departments:










Prior to September, 1919, the financial administration of the Division of Construction had functioned as a part of that division. At the request of the vice president the work was transferred on that date to the jurisdiction of the newly appointed general comptroller in Washington. The offices of the financial section remained in Philadelphia, however, until February, 1920, when the entire force removed to Washington.

The Supply and Sales Division, which was organized May 1, 1919, was transferred to Washington on January 13, 1920, and established as a separate division of the Corporation reporting to the president. The transfer included the plant disposal section of the division of shipyard plants, the activities of which were of a similar nature.

In February, 1920, the Legal Division was transferred to the office of the general counsel at Washington.

The title of the general cancellations, claims, and contracts board was changed to Construction Claims Board, and the board was transferred to Washington in February, 1920, to report direct to the President of the Corporation.

# GROWTH OF SHIPBUILDING IN THE UNITED STATES 1813 TO 1920

1813-1819	-	AVERAGE YEARLY TONNAGE 1 3 1,7 3 0 D. W. T.
1820-1829	-	AVERAGE YEARLY TONNAGE 1 3 2,9 6 3 D. W. T.
1830-1839	-	AVERAGE YEARLY TONNAGE 1 6 9,0 4 2 D. W. T.
1840-1849	-	AVERAGE YEARLY TONNAGE 2 3 4,2 5 4 D. W. T.
1850-1859		AVERAGE YEARLY TONNAGE 3 5 9,3 7 2 D. W. T.
1860-1869		AVERAGE YEARLY TONNAGE 4 4 0,0 7 9 D. W. T.
1870-1879		AVERAGE YEARLY TONNAGE 5 9 6,6 3 1 D. W. T.
1880-1889		AVERAGE YEARLY TONNAGE 5 0 9,7 0 7 D. W. T.
1890-1899		AVERAGE YEARLY TONNAGE 5 3 8,5 9 6 D. W. T.
1900-1909		AVERAGE YEARLY TONNAGE 6 3 3,0 2 5 D. W. T.
1910-1916		AVERAGE YEARLY TONNAGE 4 4 3,4 6 5 D. W. T.
1917		9 8 7,0 1 8 D. W. T.
1918		3,2 2,3 5 0 6 D. W. T.

1919  6 5 5 8 8 2 3  
D. W. T.

1908  9 2 1 3 2 4 D.W.T.

LARGEST YEARLY PRODUCTION  
PREVIOUS TO WORLD WAR

As the construction program is nearing completion, the consolidation of the work with the repair activities has been effected without interruption to regular procedure, and a compact organization has resulted which will enable the corporation to close up the building schedules economically. The principal work remaining to be done is confined to contract steel ships, especially the 26 passenger vessels. All keels have been laid for the ships built in foreign yards, for requisitioned ships, and for the fabricated ships building at Hog Island and Bristol, Pa. All composite ships have been delivered, and the wood shipbuilding schedules have been completed except in the case of 18 tugs. Many steel yards have delivered all ships under contract with the Corporation.

Expenditures for plant construction and for housing and transportation have long since ceased, except in connection with maintenance costs in certain cases, and many plants have been sold or dismantled to liquidate our interest. Returns from housing rentals are approximately \$1,000,000 net per year.

The program for dry docks and marine railways is not yet completed, but as these facilities are essential to the satisfactory repair and operation of the fleet no work has been canceled. The full amount of the advances made by the Corporation are returnable in nearly all cases, however, and ultimately the expenditures will have been negligible.

Although the policy of reducing the working force of the corporation was adopted shortly after the signing of the armistice, the greatest results were attained during the fiscal year ending June 30, 1920.

Within that period the scope of the activities of the Corporation was entirely limited to the necessities of the shipbuilding industry under normal conditions, and it was possible to discontinue many interests which were of paramount importance during the war. The consolidation of construction and repair activities on March 1, 1920, made it possible to effect other reductions in the number of the personnel, which has decreased at the rapid rate shown in the following schedule:

*Construction Division.*

	June 30, 1920.		Same offices, June 30, 1919.		Net reduction for the year.	
	Number.	Annual salaries.	Number.	Annual salaries.	Number.	Annual salaries.
Philadelphia office.....	296	\$542,363	1,282	\$2,144,174	986	\$1,601,811
District offices.....	861	2,219,610	2,057	4,827,912	1,196	2,608,302
Total.....	1,157	2,761,973	3,339	6,972,086	2,182	4,210,113

The necessary adjustments in the field offices could not be made as promptly as in the home office, and actual consolidation of the activities in the districts did not take place until June 1, 1920. After that date the decrease in the personnel assigned to construction work will be rapid.

The charts which accompany the report indicate the expenditures on account of construction from the beginning of the program. Disbursements during the year have been at the following rates:

*Construction program.*

Month.	Monthly expenditure.	Cumulative total.
<b>1919.</b>		
July.....	\$105,577,776.78	\$105,577,776.78
August.....	102,344,971.23	207,922,748.01
September.....	124,261,438.27	332,184,186.28
October.....	90,147,559.48	422,331,745.76
November.....	75,555,496.04	497,887,242.80
December.....	57,446,106.84	555,333,349.94
<b>1920.</b>		
January.....	51,045,007.66	606,378,357.30
February.....	56,163,352.99	662,541,710.29
March.....	51,189,935.72	713,731,646.01
April.....	46,218,139.99	759,949,786.00
May.....	54,082,673.12	814,032,459.12
June.....	51,976,256.68	866,008,714.80

The construction included in the active program and the progress made by June 30, 1920, toward completion are shown in the following table:

*The active program and status of construction as of June 30, 1920.*

	Requisitioned steel.		Contract steel.		Contract wood and composite.		Contract concrete.		Total.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Active program.....	384	2,687,266	1,312	8,966,695	607	1,948,250	12	73,500	2,315	13,675,711
Delivered.....	374	2,594,166	1,101	7,051,445	589	1,948,250	6	28,500	2,070	11,622,361
Being outfitted.....	1	4,300	101	854,375	18	.....	4	30,000	124	888,675
On ways.....	9	88,800	84	765,975	.....	.....	2	15,000	95	869,775
Keels not laid.....	.....	.....	26	294,900	.....	.....	.....	.....	26	294,900

**YARDS AND DOCKS.**

**Shipyard Plants.**

Before the close of the year 1917, it was found that the great expansion in shipbuilding facilities needed to meet the ship construction program required the Corporation to make large investments for plant construction and extension. The shipyard plants division was established for the purpose of assisting inexperienced builders in the design of ways and plant, reporting on proposed



Fleet Corporation investments in plant improvements, and supervising the design and construction of certain shipyards in which the Fleet Corporation held sole ownership.

By the beginning of the last fiscal year the activities of the division had undergone considerable change. Shipyard plant construction was practically at an end; most of the new yards and the extensions of the old yards had been completed; and where work had not reached an advanced stage, construction was suspended and proposed additions canceled. There remain only the construction of concentration yards for the storage of surplus materials for the Division of Supply and Sales, and the completion of minor items of a few important projects which were nearly completed. In such cases the nature of the ship contracts in force justified the improvements, the sale of which at an appraised value was provided for in the plant-improvement contracts.

As far as shipbuilding plants were concerned, the activities of the division had changed from those of construction to those of administration. These functions included the sale or dismantling of complete yards owned by the Corporation and no longer needed for ship-construction purposes, the release to the Division of Supply and Sales of plant equipment as it became surplus, the preparation of survey maps and collection of land records in order that leases might be renewed at the proper time and titles to land owned by the corporation made clear, the examination of proposed settlements of canceled ship contracts where plant investments were involved, and adjustments of canceled plant construction contracts. With the exception of the disposal of complete plants, of which some details will be given later, this work was largely of a routine nature.

During the fiscal year the Corporation interest in shipyard plants rapidly decreased. At the height of the shipbuilding program 218 yards were constructing ships, of which 80 were building steel vessels, 131 had wood and composite ship contracts, and 7 were working on concrete steamers. At the present time the number of yards working on Fleet Corporation contracts has been reduced to 41. These are listed in Table I.

While the expenditures for all plant construction, including yards owned entirely by the Corporation, were less than 6 per cent of the cost of ships, 179 yards, including installation plants, were given financial assistance for plant construction. In some cases loans or advances were made, to be repaid from ship contract progress payments, the amounts being secured by mortgages on the plants; in others an allowance for plant improvements was included in the contractor's compensation for ship construction, in which cases the Corporation retained no interest in the property after the completion of

the ships; in others a direct investment was made, the Corporation taking title to the improvements.

A large proportion of the number of direct investments was for additional fire-protection equipment and for barracks for the armed guard, but the amounts involved in each case were comparatively small. These minor improvements were transferred to the Division of Supply and Sales as soon as they were no longer needed for ship-construction purposes.

Efforts have been made to liquidate the Corporation interest in plant construction wherever possible. Where the Corporation ownership included the entire plant or a major portion of it, the greater return to be obtained by sale as a complete plant rather than by dismantling the property and selling such items as could be salvaged led to the establishment, early in 1919, of a plant-disposal section. As these plants completed the ship construction work, consideration was given to the possibility of disposing of each plant as a unit, in which case the necessary data and advertisements were prepared and proposals solicited. When plants could not be sold in this manner they were dismantled, salvaged, and certified to the Division of Supply and Sales for disposal of the materials.

A complete list of shipyards having contracts with the Corporation was included in the third annual report. No contracts with new yards were awarded during the year.

Early in 1920 it was decided to center all sales activities in the Division of Supply and Sales and to accomplish this purpose the plant disposal section was transferred to that division. Since that time it has been the policy to release all shipyard property to the sales division as quickly as possible after ship construction has been completed. Table II contains a list of yards in which a major interest owned by the Fleet Corporation has been so transferred.

Wherever possible, plant improvements have been assigned to contractors in connection with the settlement of ship cancellation claims, as this method of liquidating the interest of the Corporation is more satisfactory than disposal by sale. In such cases, however, the returns on the original investments are necessarily very low because of the abnormal prices and conditions under which the improvements were made.

The following yards have either been disposed of or negotiations commenced to transfer the Corporation interest by the most suitable method available in each case:

*Submarine Boat Corporation, Newark, N. J.*—The disposition of this yard is of especial interest, as it is the largest yard in the country that has completed the number of ships under contract and the first of the three great fabricating yards (Hog Island, Newark Bay, and Bristol) to be disposed of. With 28 ways and a capacity of over

500,000 deadweight tons a year, this plant was built by the Fleet Corporation at a cost of approximately \$18,000,000. The original contract included one hundred and fifty 5,000-ton ships, of which 32 were canceled. The remainder, 118 ships, have been completed.

*Bayles Shipyard, Port Jefferson, Long Island, N. Y.*—This yard has two ways for building 5,000-ton steel ships and two tugboat ways. The entire plant, together with two partially completed 5,000-ton ships and two partially completed tugs, has been sold.

*Carolina Shipbuilding Corporation, Wilmington, N. C.*—This four-way yard, built by the Corporation at a cost of approximately \$2,400,000 for the construction of 9,600-ton ships, has been sold.

*Bethlehem Shipbuilding Corporation, Sparrows Point, Md.*—The sale of the improvements, including three shipbuilding ways, provided by the Corporation at a cost of approximately \$3,200,000, is now under consideration.

*Bethlehem Shipbuilding Corporation, Alameda, Calif.*—Two new ways, a marine shop, and other improvements were made at a cost of \$1,550,000. Negotiation have been commenced for the purchase of the Corporation interest.

*Skinner & Eddy Corporation, Plant No. 2, Seattle, Wash.*—This plant was purchased from the Seattle Construction & Dry Dock Co. at a cost of approximately \$4,000,000 and leased to the Skinner & Eddy Corporation, who completed their work in the plant in November, 1919. Consideration is now being given to the sale of the property.

*Columbia River Shipbuilding Corporation, Portland, Oreg.*—This was a three-way yard owned by the contractor. Two additional ways and other improvements were constructed by the Fleet Corporation at a cost of \$465,000. When ship construction work had been completed an attempt was made without success to sell the corporation interest. The only course left to the Corporation was to remove the salvageable portion of its property, which has been done.

*Terry Shipbuilding Corporation, Savannah, Ga.*—The Corporation's interest in this yard, obtained through loans and advances for plant of approximately \$1,650,000, has been transferred to the contractor in connection with the settlement of claims on account of ship cancellation.

*Steel fabricating plants at Leetsdale and Pottstown, Pa., operated by McClintic-Marshall Co.*—Two plants, erected at a cost of approximately \$6,000,000 by the McClintic-Marshall Co., as agent, for the purpose of fabricating ship steel for Hog Island, have been sold to the agent.

*Richmond Boiler Plant, Richmond, Va.*—This plant was built for the construction of 200 Scotch marine boilers per year and was designed to be the best-equipped marine-boiler plant in the country.

Plant construction was suspended in 1919, after the building had been completed but before the installation of equipment had proceeded very far. The cost was about \$2,050,000, including the cost of canceling orders for equipment. As it stands, the plant represents an investment of about \$1,800,000. It was advertised for sale and several offers are now receiving consideration.

#### WOOD YARDS.

*Traylor Shipbuilding Corporation, Cornwells, Pa.*—A manufacturing plant owned by the contractor was developed by the Corporation into a five-way wooden-ship yard at a cost of approximately \$1,400,000. The Corporation's interest, with the exception of a 40-acre tract known as the Mundy property, 48 bungalows, and a small amount of movable equipment, has been sold to the contractor.

*L. H. Shattuck (Inc.), Portsmouth, N. H.*—A 12-way yard for the construction of Ferris hulls was built by the corporation at a cost of approximately \$740,000. The permanent improvements and a portion of the equipment have been sold for use as a manufacturing plant.

*Maryland Shipbuilding Co., Sollers Point, Md.*—The cost to the Corporation of this four-way wooden-ship yard, including land, was approximately \$640,000. When ship construction had been terminated, the plant was advertised for sale, but no satisfactory proposals were obtained. The yard is now being used by the Division of Supply and Sales for storage purposes.

*St. Johns River Shipyard, South Jacksonville, Fla.*—This seven-way wooden-ship yard has been advertised for sale and offers are now under consideration.

*National Shipbuilding & Dry Dock Co., Savannah, Ga.*—This two-way yard was constructed under cost-plus wooden-ship contracts. The cost to the Corporation was approximately \$270,000. The plant will be advertised for sale at an early date.

*Quantico Shipyard, Quantico, Va.*—This is a four-way wooden-ship yard, formerly operated by the Missouri Valley Bridge & Iron Co., and has been transferred to the Navy Department for the use of the Marine Corps.

*C. H. Tenny & Co., Hampton, Va.*—A portion of this yard belonging to the Corporation has been sold to the Hampton Shipbuilding & Dry Dock Co., successors to the owners of the original yard.

#### CONCRETE YARDS.

*Liberty Shipbuilding Co., Wilmington, N. C.*—This two-way yard was built for the construction of concrete ships under an agency contract. The cost to the Corporation was approximately \$880,000. Negotiations are now being conducted by the Division of Supply

and Sales for its sale to the city of Wilmington as a shipping terminal.

*A. Bentley & Son, Jacksonville, Fla.*—Negotiations are under way for the transfer of this yard to the city of Jacksonville in connection with the settlement of claims which the city made against the Corporation in connection with the marine railway built by the Terry & Brittain Co. The yard has two ways for 7,500-ton concrete ships and cost approximately \$840,000. It is the intention of the city to convert it into a shipping terminal.

*San Diego Concrete Shipbuilding Co., San Diego, Calif.*—This two-way shipyard was built for the construction of 7,500-ton concrete ships, and has been transferred to the Navy Department, subject to the contractor's option to purchase at an appraised value at the conclusion of the contract, and to use by the Corporation for the completion of the two concrete ships now being constructed.

*Fred T. Ley & Co. (Inc.), Mobile, Ala.*—This is a two-way yard constructed by the Corporation to build 7,500-ton concrete ships. The contractor has an option to purchase the yard at an appraised value at the conclusion of the contract. The joint appraisal has just been completed, and negotiations will be commenced in the near future.

#### Repair Facilities.

The rapid completion of shipyard plants was closely followed by a period of increasing ship deliveries, and before the end of 1918 it was recognized that an increase in dry-docking facilities was essential to the successful operation and maintenance of the fleet. Ships require docking before delivery in many cases and every six to eight months thereafter, in addition to docking for underwater repairs, made necessary by accident at sea, stranding, etc.

This work of preparing a docking program was assigned to the division of shipyard plants, and a complete survey of the facilities existing in the United States at that time was made in conjunction with the Port and Harbor Facilities Commission. The minimum number and the location of the docks and marine railways required to meet the necessities was determined and the following program adopted, as shown in Table III:

Marine railways .....	13
Floating docks .....	17
Graving docks .....	2

As there was no possible way to carry out these projects as private enterprises, it was necessary for the Corporation to finance the program, or at least to assist in that manner in order to utilize its tonnage most efficiently and economically.

Funds for this purpose were included in the appropriations carried by the sundry civil act approved July 1, 1918, and the deficiency

act approved November 4, 1918. Acting under these authorizations, three forms of contracts for dry docks, marine railways, and repair plants covering expenditures by the Corporation of about \$20,000,000 have been executed as follows:

(a) The Corporation agrees to lend to the contractor the entire amount, or a fixed sum, toward the financing of the construction of the dry dock or marine railway with its supporting facilities. The loan, which is secured by bond and mortgages, is to be repaid to the Corporation in installments (in three cases with a write-off due to depreciation).

(b) The contractor agrees to construct a dry dock at the expense of the Corporation, and upon the completion of the dock to lease it under suitable terms. When the rental which has been paid equals the actual cost of the dock, plus interest up to date of last payment, the dock will be deeded to the contractor.

(c) The contractor agrees to construct pontoons which are afterwards to be assembled to form dry docks which are to be sold by the Corporation to firms having adequate repair facilities at ports approved by the Port and Harbor Facilities Commission.

#### Marine Railways.

The present status of the 13 marine railway contracts is as follows:

(a) Complete and in operation (9):

Henderson Shipbuilding Co., Mobile, Ala.  
 Crowninshield Shipbuilding Co., South Somersset, Mass.  
 Beaumont Shipbuilding & Dry Dock Co., Beaumont, Tex.  
 Cumberland Shipbuilding Co., Portland, Me.  
 Tampa Dock Co., Tampa, Fla.  
 Federal Marine Railway, Savannah, Ga.  
 Barnes & Tibbitts, Alameda, Calif. (2).  
 American Dredging Co., Camden, N. J.

(b) Construction in progress (2):

*Lord Dry Dock Corporation, Providence, R. I.*—The marine railway is in operation, but the repair plant is not completed.

*Southern Shipyard Corporation, Newport News, Va.*—Eighty per cent completed.

(c) Construction suspended:

*Merrill-Stevens Shipbuilding Co., Jacksonville, Fla.*—This uncompleted marine railway, which had been taken over by the Emergency Fleet Corporation, was sold to the Merrill-Stevens Shipbuilding Co., and construction has been suspended.

*Puget Sound Marine Railway Co., Tacoma, Wash.*—A large portion of the material required for this marine railway was purchased by the Emergency Fleet Corporation and stored at the yard. No construction work was, however, undertaken and these materials have been certified to the Supply and Sales Division for disposal.

**Floating Dry Docks.**

The present status of the contracts for the 17 dry docks is as follows:

*(a) Completed and in operation (5):*

Alabama Dry Dock & Shipbuilding Co., Mobile Ala.  
Bethlehem Shipbuilding Corporation (Ltd.), Sparrows Point, Md.  
Beaumont Shipbuilding & Dry Dock Co., Beaumont, Tex.  
Galveston Dry Dock & Construction Co., Galveston, Tex.  
Terry & Brittain, Savannah, Ga.

*(b) Construction in progress (11):*

*Jahncke Dry Dock & Repair Co., New Orleans, La.*—The 10,000-ton dry dock being constructed by this company was placed in operation as a whole on February 15, 1920, though it will not be entirely completed for some time. The two sections of this dock had been separately placed in operation earlier. Some work remains to be done on the repair plant.

*Bruce Dry Dock Co., Pensacola, Fla.*—The 5,000-ton dry dock being constructed by this company is 81 per cent completed. Construction was begun on August 7, 1919. The work has been delayed by strikes, but is now progressing favorably.

*Ramberg Iron Works, New York.*—The 5,000-ton dry dock being constructed by this company is 27 per cent completed. Construction was begun on August 27, 1919, but has been greatly delayed by strikes.

**Floating dry docks being constructed by the Corporation (8):**

In addition to the three dry docks referred to above, the Corporation is constructing 40 pontoons, from which eight 10,000-ton dry docks are to be assembled. These are being constructed in accordance with plans prepared by the division of shipyard plants of the Corporation, which are a modification of designs of the Division of Yards and Docks, United States Navy. Contracts were awarded for the construction of these pontoons as follows:

Contract No.	Contractor.	Inter- mediate pontoons.	End pon- toons.	Total.
1	Atlantic Gulf & Pacific Co.....	6	8	14
2	Wm. H. Gahagan (Inc.).....	6	4	10
3	Kingston Shipbuilding Corporation.....	6	2	8
4	Narragansett Shipbuilding Co.....	6	2	8

The contracts with these firms cover the construction only, the Corporation furnishing all materials. Progress on all of these contracts has been greatly delayed by slow delivery of materials, due to strikes and embargoes. The work has so far largely been done during winter months.

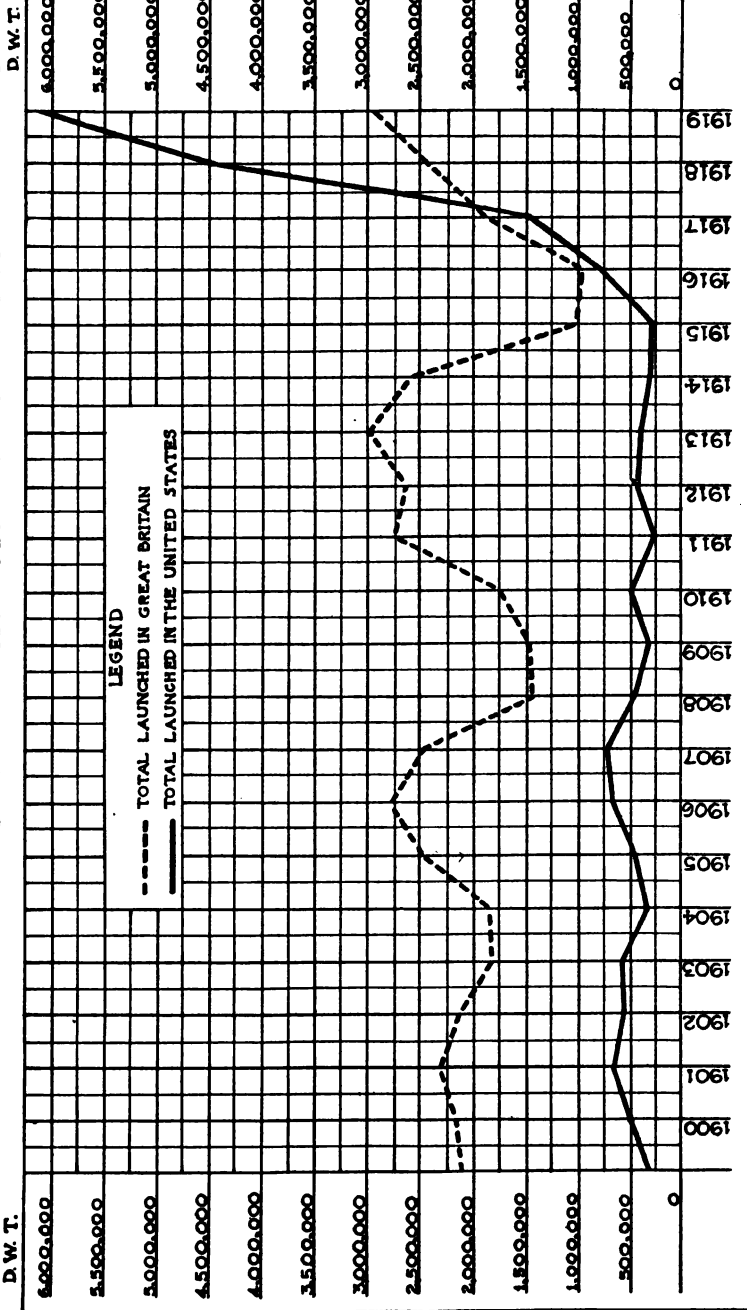
*Atlantic, Gulf & Pacific Co., Brooklyn, N. Y.*—Work on the first pontoon was begun on September 15, 1919. At present seven pontoons are under way, and construction under contract as a whole is 27 per cent completed.

*Wm. H. Gahagan (Inc.), Brooklyn, N. Y.*—Work on the first pontoon was begun on October 23, 1919. At present three pontoons are under way, and construction under contract as a whole is 12 per cent completed.

*Kingston Shipbuilding Corporation, Kingston, N. Y.*—Work on the first pontoon was begun on July 11, 1919. At present six pontoons are under way, and the construction under contract as a whole is 55 per cent completed.

SHIPS LAUNCHED IN THE UNITED STATES AND GREAT BRITAIN 1900 TO 1919

D. W. T.





*Narragansett Shipbuilding Co., Tiverton, R. I.*—Work on the first pontoon was begun on September 18, 1919. At present two pontoons are under way, and the construction under contract as a whole is 5 per cent completed.

Five of the dry docks to be assembled from these pontoons have been sold:

Two to the Fraser, Brace & Co., Clifton, Staten Island, N. Y.

One to the Perth Amboy Dry Dock Co., Perth Amboy, N. J.

One to the Staten Island Shipbuilding Co., Mariners Harbor, Staten Island, N. Y.

One to the Lord Dry Dock Co., Weehawken, N. J.

(c) Construction suspended (1):

*Merrill-Stevens Shipbuilding Co., Jacksonville, Fla.*—This uncompleted dry dock, which had been taken over by the Corporation, was sold to Merrill-Stevens Shipbuilding Co., and construction has been suspended.

**Graving Docks.**

Norfolk Navy Yard (2):

Two graving docks 465 feet long have been completed by the George Leary Construction Co. at this yard. These docks were flooded on October 31, 1919. When the docks, including the dredging at the entrance, were completed they were turned over to the United States Navy, and on April 5, 1920, were put in operation. A contract was awarded for the construction of timber piers at the entrance to these dry docks and these have also been completed.

**Organization.**

Although much construction work incident to the dock program is still in progress, a small organization only is required to conduct the work, and the personnel of the division has been reduced throughout the year from 78 in July, 1919, to 9 at the close of the fiscal year. As a result of this reduction in the force the division was reduced to a section in February, 1920, and was later consolidated with the ship construction section.

**SHIP CONSTRUCTION.**

During the year the deliveries of finished ships exceeded all records established prior to that time, and these results were accomplished without overtime or other aids to rapid production. The shipyard worker of the United States has developed an expertness which has raised the efficiency of the various crafts to a high plane, and production has kept pace correspondingly. At the beginning of the program there was a nucleus of 50,000 skilled mechanics in our shipbuilding industry, and with the assistance of the Corporation this number was expanded to 385,000 men, who received a training either directly or indirectly and became proficient in the trade employed in the building of ships.

The credit for the accomplishment of the aims of the Corporation is, therefore, due to these men who have surpassed all previous performance in the shipbuilding of the world. Their skill is now

available to the yards building on private account, and this construction has already reached proportions of considerable magnitude and far in excess of the volume upon which our yards were engaged before the war. A new industry has been created and bids fair to remain an important feature of our commercial structure.

**Production During the Fiscal Year.**

Production during the year measured in delivered ships only represented a total of 1,002 vessels, of 5,694,567 dead-weight tons. Deliveries per month were as follows:

1919			1920		
Month.	Number.	Tonnage.	Month.	Number.	Tonnage.
July.....	125	676, 128	January.....	44	284, 408
August.....	135	714, 375	February.....	43	275, 575
September.....	150	810, 386	March.....	54	346, 983
October.....	120	599, 200	April.....	88	518, 433
November.....	92	496, 220	May.....	47	265, 960
December.....	73	491, 341	June.....	31	215, 658
<b>Total.....</b>	<b>695</b>	<b>3,787, 650</b>	<b>Total.....</b>	<b>307</b>	<b>1,906, 91</b>

Grand total, 1,002 ships; 5,694,567 deadweight tons.

The maximum output in one month since 1917 was in September, 1919, when 150 ships of 810,386 deadweight tons were completed. This tonnage, in ocean-going ships alone, is much greater than the maximum tonnage of all ships, large and small, built in the United States in any entire year before the war, with the single exception of the output in the year 1908 when 1,457 ships of 9,212,324 tons were built, including vessels as small as 5 net tons. It is interesting to consider, in this connection, the annual construction in the United States since 1900, a period which represents in general a greater production than at any time since 1855, the era of the clipper ship.

*Shipbuilding in United States since 1900.*

Fiscal year.	Number of ships.	Dead-weight tonnage.	Fiscal year.	Number of ships.	Dead-weight tonnage.
1900.....	1, 447	590, 685	1910.....	1, 361	513, 102
1901.....	1, 580	725, 233	1911.....	1, 422	436, 743
1902.....	1, 491	703, 246	1912.....	1, 505	349, 003
1903.....	1, 311	654, 228	1913.....	1, 475	519, 232
1904.....	1, 184	567, 813	1914.....	1, 151	474, 375
1905.....	1, 102	495, 474	1915.....	1, 157	337, 683
1906.....	1, 221	628, 117	1916.....	937	488, 119
1907.....	1, 157	706, 998	1917.....	1, 297	996, 718
1908.....	1, 457	921, 324	1918.....	1, 528	1, 951, 302
1909.....	1, 247	357, 000	1919.....	1, 953	4, 989, 931

It will be observed that while the number of ships built in the last three years has not greatly increased over former records, the tonnage has attained large proportions because all ships constructed by the Corporation are of the ocean-going type. During that time the share of the Corporation in the total shipbuilding in the United States was as follows:

Fiscal year.	Number.	Tonnage.
1918.....	215	1,383,296
1919.....	853	4,544,498
1920.....	1,002	5,694,567

The progress made by the Corporation toward the completion of the entire program is shown in the appendix as follows: Table IV, keels laid; Table V, ships launched; Table VI, ships delivered.

Deliveries by districts are shown in detail in Table VII and by States in Table VIII. Deliveries from the entire Atlantic coast to date are approximately 7 per cent less than those for the West coast.

	Number.	Tonnage.
Pacific coast (except Oregon).....	572	4,142,100
Delaware River.....	242	1,937,081
North Atlantic.....	366	1,905,530
Great Lakes.....	470	1,596,650
Middle Atlantic.....	106	704,510
Southern.....	173	686,700
Oregon.....	116	443,300
Japan.....	25	206,490
<b>Total.....</b>	<b>2,070</b>	<b>11,622,361</b>

#### Active Program.

The program at the close of the last fiscal year contemplated 2,368 ships of 13,616,836 dead-weight tons. Because of additional cancellations and transfer of our interest in certain ships under construction, the program has been reduced to 2,315 ships of 13,675,711 dead-weight tons, by class of construction and by type, as follows:

#### Active program by class.

Class.	Number.	Dead-weight tons.
Requisitioned steel.....	384	2,687,266
Contract steel.....	1,312	8,966,695
Contract wood.....	589	1,885,250
Contract composite.....	18	63,000
Contract concrete.....	12	73,500
<b>Total.....</b>	<b>2,315</b>	<b>13,675,711</b>

*Active program by type.*

Type.	Number.	Dead-weight tons.
<b>Steel:</b>		
Cargo.....	1,420	9,509,234
Tanker.....	138	1,363,030
Refrigerator.....	19	161,400
Transport.....	22	179,775
Collier.....	9	70,350
Passenger and cargo.....	23	347,973
Barge.....	6	22,200
Tugs.....	54	.....
<b>Total steel.....</b>	<b>1,696</b>	<b>11,653,961</b>
<b>Wood:</b>		
Cargo.....	304	1,121,350
Barge.....	84	277,000
Tugs.....	75	.....
Hulls.....	115	447,700
Sailing.....	10	34,500
Tanker.....	1	4,700
<b>Total wood.....</b>	<b>589</b>	<b>1,885,250</b>
<b>Composite:</b>		
Cargo.....	18	63,000
<b>Concrete:</b>		
Cargo.....	4	13,500
Tanker.....	8	60,000
<b>Total concrete.....</b>	<b>12</b>	<b>73,500</b>
<b>Grand total.....</b>	<b>2,315</b>	<b>13,675,711</b>

The active program is shown in detail in the Appendix, Table IX, by type of ship, and Table X, by class of construction.

The net reduction in the program and its relation to the accumulated program which represents all contracts awarded by the Corporation from the beginning are shown in Table XI. Reduction in the program by geographical sections is shown by Table XII.

*Percentage of completion.*—On June 30, 1920, production was 93.3 per cent complete, as represented by the following work performed:

	Number.	Dead-weight tons.	Per cent of program.
Keels laid.....	2,289	13,380,811	98.9
Ships launched.....	2,194	12,511,036	94.8
Ships delivered.....	2,070	11,622,361	89.5

*Performance to June 30, 1920.*

	Keels laid.		Launched.		Delivered.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Contract steel.....	1,286	8,671,795	1,202	7,905,820	1,101	7,051,445
Requisitioned steel.....	384	7,687,266	375	2,598,466	374	2,594,166
Composite.....	18	63,000	18	63,000	18	63,000
Wood.....	589	1,885,250	589	1,885,250	571	1,885,250
Concrete.....	12	73,500	10	58,500	6	28,500
<b>Total.....</b>	<b>2,289</b>	<b>13,380,811</b>	<b>2,194</b>	<b>12,511,036</b>	<b>2,070</b>	<b>11,622,361</b>

*Balance of work to be performed June 30, 1920.*

	Keels to lay.		To launch.		To deliver.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Contract steel.....	26	294,900	110	1,060,875	211	1,915,250
Requisitioned steel.....	0	0	9	88,800	10	93,100
Composite.....	0	0	0	0	0	0
Wood.....	0	0	0	0	18	0
Concrete.....	0	0	2	15,000	6	45,000
<b>Total.....</b>	<b>26</b>	<b>294,900</b>	<b>121</b>	<b>1,164,675</b>	<b>245</b>	<b>2,053,350</b>

The keels not yet laid are mainly those for passenger ships.

*Contemplated deliveries to complete the program.*—During the fiscal year ending June 30, 1921, at least 1,685,750 dead-weight tons will be delivered, leaving only 367,600 dead-weight tons under construction. This tonnage will be principally the passenger ships, and the work unfinished on that date will be mainly fitting out the ships and installing interior finish. (Table XVII.)

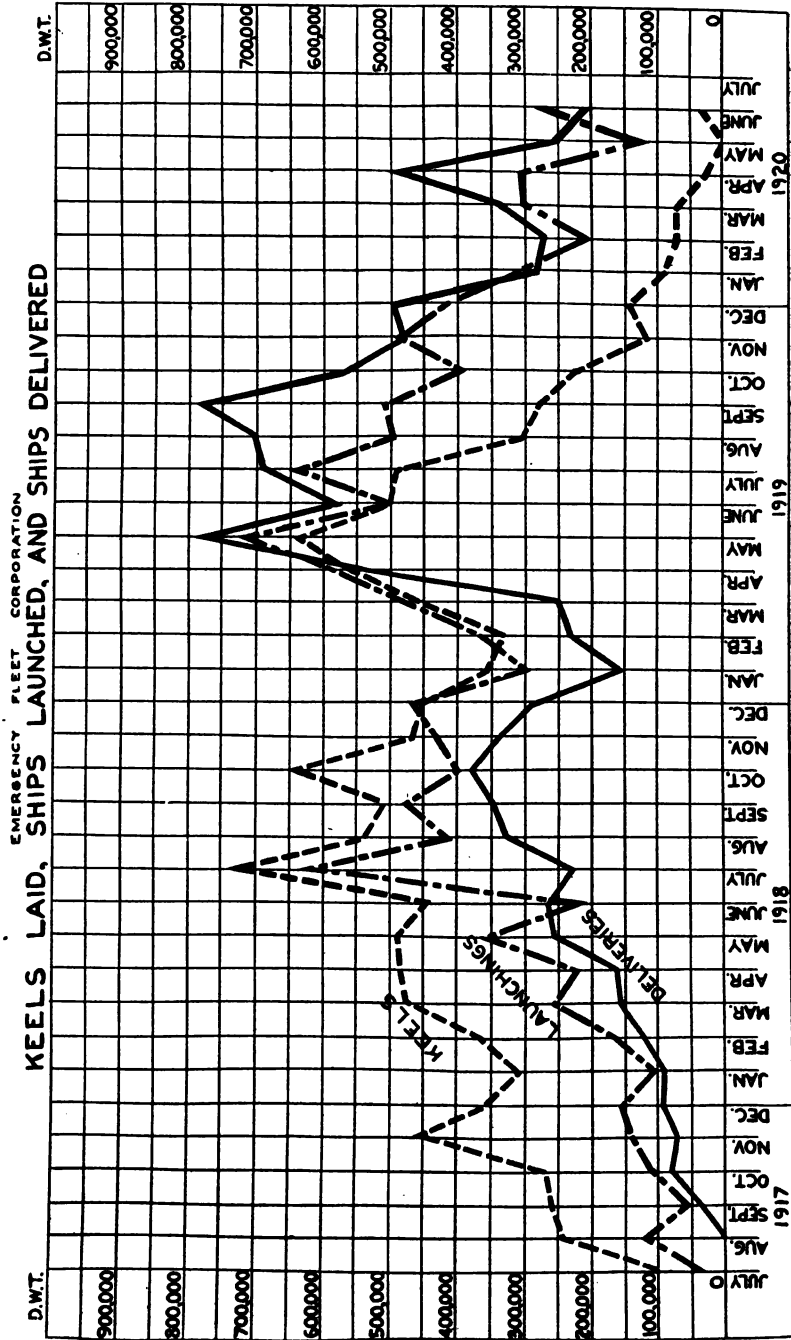
*Yards which have completed contracts.*—During the period of maximum construction 80 steel yards were engaged upon work for the Corporation. Of this number yards have completed contracts, as shown on Table XIV.

*Reduction in the program.*—The accumulated program included 3,268 ships, of 18,381,276 dead-weight tons. After the armistice all construction was canceled whenever a saving to the Corporation could be effected. This has reduced the program by 951 ships, of 4,697,465 dead-weight tons, which represents a decrease of 25½ per cent and a reduction in ultimate expenditures of at least \$650,000,000.

No further cancellations are now possible without involving a considerable loss, and the following summary represents the extent of cancellation in connection with the different types of construction under the original program.

Type.	Original program.		Cancellations.	
	Number.	Tonnage.	Number.	Tonnage.
Requisitioned.....	419	2,963,406	47	1,387,040
Contract steel.....	1,739	11,888,406	425	2,913,875
Contract wood.....	1,017	3,052,200	428	1,166,950
Composite.....	50	175,000	32	112,000
Concrete.....	43	302,000	31	228,500
<b>Total.....</b>	<b>3,268</b>	<b>18,381,276</b>	<b>963</b>	<b>4,806,365</b>

<sup>1</sup> Twelve requisitioned ships having a dead-weight tonnage of 110,900 were changed to contract steel and included in the active program, and two ships are under suspension.



The total actual cancellations by districts are shown in the following schedule :

	Number.	Tonnage.
North Atlantic.....	170	454, 650
Delaware River.....	110	889, 675
Middle Atlantic.....	91	409, 560
Southern.....	293	1, 289, 650
South Pacific.....	89	754, 969
North Pacific.....	108	775, 050
Oregon.....	38	144, 000
Great Lakes.....	64	110, 830
Total.....	963	4, 808, 365

The complete cancellation program is included in the appendix, as follows: Table XV, cancellation by types and districts; Table XVI, cancellation by types and States.

The cancellation of ship contracts has resulted in a large number of claims against the Corporation, which are referred to in another section of this report.

**Requisitioned Ships.**

On August 3, 1917, 431 vessels under construction in shipyards in the United States were requisitioned by the Government. Thirteen of the number were released before completion to former owners; 22 have been canceled, and the status of 12 changed from requisitioned to contract vessels, thereby leaving a total of 384 requisitioned vessels on the active construction program of the Corporation.

Of the requisitioned ships complete, 73 vessels, of 684,191 dead-weight tons, have been reconveyed to the former owners, and 83 vessels, of 486,025 dead-weight tons, have been sold to shipping interests other than the former owners.

Only 10 requisitioned ships remain to be delivered, and of this number 9 are yet to be launched. All of these vessels will be completed before the close of the year 1920.

The following tables show the number of vessels and deadweight tonnage under construction for American and foreign owners, requisitioned on August 3, 1917; also the original and active program :

*Nationality of former owners of requisitioned vessels.*

Nationality.	Number of ves-sels.	Dead-weight tons.
American.....	185	1, 534, 111
British.....	163	989, 989
French.....	34	234, 270
Norwegian.....	38	249, 148
Italian.....	4	29, 200
Danish.....	4	15, 209
Russian.....	2	14, 600
Japanese.....	1	8, 809
Total.....	431	3, 074, 308

*Nationality of former owners of requisitioned vessels—Continued.*

	Number.	Dead-weight tons.
Original program.....	431	3,074,306
Canceled, released, or changed to contract.....	47	387,040
Active program.....	384	2,687,266
Delivered.....	374	2,594,166
To be delivered.....	10	93,100

**Wood Ships.**

The wood ship program of the Corporation had reached a total of 1,017 vessels of various types at the time that construction was curtailed. Of this number 428 were subsequently canceled, leaving 589 to be completed or partially completed, as the circumstances justified. The original and active program was divided as follows:

	Number.	Dead-weight tons.
Steamships.....	305	1,128,050
Steamship hulls only.....	115	447,700
Steamships converted to barges.....	56	206,000
Steamships converted to sailing vessels.....	10	34,500
Barges.....	28	71,000
Ocean tugs.....	13	.....
Harbor tugs.....	62	.....
<b>Total.....</b>	<b>589</b>	<b>1,885,250</b>

The construction represented by the above tabulation is wholly complete at the close of the fiscal year with the exception of 18 wood harbor tugs, all of which are now in advanced stages of completion and will be delivered within 90 days.

The 115 steamships which were completed as to hulls only, and the 56 vessels converted to barges, a total of 171, have all been delivered and certified as surplus to the Supply and Sales Division.

*Wood-ship program.*

	Original program.		Canceled.		Active program.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Cargo.....	521	1,939,050	217	817,700	304	1,121,350
Barge.....	141	368,500	113	297,500	28	71,000
Finished hull.....	119	463,550	4	15,850	115	447,700
Sailing vessels.....	10	34,500	.....	.....	10	34,500
Barge (converted).....	64	241,900	8	35,900	56	206,000
Tanker.....	1	4,700	.....	.....	1	4,700
Tug (ocean).....	61	( <sup>1</sup> )	48	( <sup>1</sup> )	13	( <sup>1</sup> )
Tug (harbor).....	100	( <sup>1</sup> )	38	( <sup>1</sup> )	62	( <sup>1</sup> )
<b>Total.....</b>	<b>1,017</b>	<b>3,082,200</b>	<b>428</b>	<b>1,166,950</b>	<b>589</b>	<b>1,885,250</b>

<sup>1</sup> No tonnage given on tugs.



Of the 428 wood vessels canceled, a number were partially completed. For the removal of such construction from the ways of the different yards, a contract was entered into by the Corporation, under the date of January 27, 1920, Article II of which reads as follows:

(1) Attached hereto and marked "Schedule A" is a preliminary list of wooden hulls, the further construction of which has been canceled and which are subject to removal.

The owner shall have the option of changing and/or modifying from time to time said list by adding additional hulls thereto or by omitting hulls specified therein, as it may desire.

(2) The agent shall, at his sole cost and expense, remove from shipways and shipyards such of the hulls specified in said "Schedule A" or any other hull or hulls as the owner may, from time to time, in writing direct the agent to remove.

The agent shall, within 120 days after the receipt of such written notice from the owner, remove the hull or hulls specified in the notice.

The agent has furnished a corporate surety bond in the sum of \$25,000 for the performance of the contract, and the Corporation, representing the owner, has agreed that "upon the removal from shipyard of the materials which have actually entered into a hull, whether it be by launching the partially completed hulls or by wrecking the hull:

(a) That title to such materials shall thereupon vest in the agent" \* \* \*.

(b) That upon presentation by the agent of a voucher approved by the district manager for the district in which the respective hulls are located, to pay to the agent the sum of \$5,000, from which shall first be deducted, however, any amount or amounts that may have accrued as liquidated damages and be due and payable by the agent to the owner under the provisions of this contract.

The work under this contract has progressed to the extent that all but three hulls have been removed, and the remainder of the work is being carried out as expeditiously as possible, certain difficulties being encountered in these cases in satisfying the contractors, which has resulted in delaying the execution of the plans. Two additional vessels at Jacksonville, Fla., have been added to the contract, and their removal is also under way.

*Classification.*—The original construction program, covering contract vessels, contemplated a distribution of the classification of these ships between Lloyds' Register of Shipping and the American Bureau of Shipping on a basis of 25 per cent of the number of vessels to the former society and 75 per cent to the latter. With the exception of 32 vessels, all the wood ships were constructed under American Bureau of Shipping rules. Classification of requisitioned vessels was continued in accordance with commitments made by former owners, which, in the majority of cases, had been placed with Lloyd's Register of Shipping. Dual classification was required on the initial contracts covering fabricated ships, as this was considered advisable,

due to the originality of this method of construction and the radical departure from former methods. Owing to the cancellation of a considerable number of vessels, it was found impossible to adhere to the original program covering percentage of distribution of the vessels between the two societies. On March 17, 1920, however, a proposal submitted by the American Bureau of Shipping was accepted, whereby classification of all vessels would be taken over by that society substantially as follows:

Vessels already completed and classed only in Lloyd's will be surveyed by the American Bureau, certificates issued, and Lloyd's class discontinued.

On vessels constructed under dual class Lloyd's classification will be discontinued.

On completed vessels building to Lloyd's class only the American Bureau will keep these vessels under survey during remainder of construction, issue the necessary certificates upon completion, and Lloyd's class will then be discontinued.

The following tabulation shows the status of the original program and the present active program relative to classification of ships:

## ACCUMULATED PROGRAM.

	Contract, steel.	Requisitioned steel.	Composite.	Wood.	Concrete.	Total.
American Bureau of Shipping and Lloyd's Register...	12					12
American Bureau of Shipping.....	844	8	50	964	34	1,900
Lloyd's Register.....	374	351		53		787
American Bureau and Lloyd's.....	408	31				439
Bureau of Veritas.....		3				3
No classification.....	101	26				127
Total.....	1,739	419	50	1,017	43	3,268

## PRESENT ACTIVE PROGRAM.

	Contract, steel.	Requisitioned steel.	Composite.	Wood.	Concrete.	Total.
American Bureau of Shipping and Lloyd's Register...	12					12
American Bureau of Shipping.....	608	8	18	557	9	1,200
Lloyd's Register.....	338	348		32	3	721
American Bureau and Lloyd's.....	308	24				332
Bureau of Veritas.....		3				3
No classification.....	46	1				47
Total.....	1,312	384	18	589	12	2,315

## Ships Built in Japan and China.

Twenty-nine of the thirty vessels built under Japanese contracts have sailed for the United States, and the last, the *Eastern Sword*, will leave about August 15.

Most of the reconditioning work that is necessary after the vessels arrive has been performed at Seattle\* and is due to the requirements of the Steamboat-Inspection Service particularly: The fitting of metal lockers that were not sent out from Japan, the connection of oil-burning apparatus, and the stowing of the surplus coal-burning equipment.

Before these improvements are added it is necessary to survey the ships and prepare specifications, which, with a general overhauling of the ships and installation of the equipment, requires about one month.

Of the 26 vessels that have been delivered to the Division of Operations, 13 are coal burners, 10 are oil burners with provision for fitting the vessels to burn coal, and 3 are coal burners equipped to use fuel oil also.

One of the four Chinese vessels, the *Celestial*, has been launched and the framing completed and will be delivered in October or November, 1920.

#### Diesel Engines.

The two 4,500 indicated horsepower 6-cylinder, 4-cycle Diesel engines and their complement of auxiliaries which were purchased in Europe are to be installed in the 12,500-ton cargo vessel *William Penn*, building at the Gloucester yards of the Pusey & Jones Co. It is anticipated that this vessel will be placed in commission in early fall. As this will be the first American vessel with an installation of such type and power, effort is being made to insure its success. On completion of the hull the engines will be installed by the American licensee for this type of machinery.

#### Passenger Ships.

In December, 1917, the Corporation prepared designs for 19 troop transports, 535 feet in length, and before construction had proceeded allocated the ships to the Navy Department for operation. The plans were then reviewed and a rearrangement of the quarters for officers, crew, and troops was considered advisable to meet the military situation. A material increase in the armament was also deemed necessary.

These vessels are now under construction at the following yards, according to plans which are practically identical:

New York Shipbuilding Corporation, Camden, N. J. (9).

Bethlehem Shipbuilding Corporation, Sparrows Point, Md. (8).

Newport News Shipbuilding & Dry Dock Co., Newport News, Va. (2).

Plans covering these revisions were prepared by the New York Shipbuilding Corporation in July and August, 1918, and at that time consideration was given to certain changes in two of the ships to adapt them to hospital service.

Upon the signing of the armistice a restudy of the design was commenced, with special reference to the accommodations provided, and plans showing the vessels laid out as passenger steamships with accommodations for first and second class passengers were prepared in the office of the chairman of the Shipping Control Committee.

Arrangement plans were also prepared in December, 1918, by the New York Shipbuilding Corporation, in which accommodations for 287 first-class passengers and 236 second-class passengers were provided. After various conferences between the Division of Construction, the Division of Operations, and the three shipbuilding firms interested, a somewhat modified plan, prepared by the New York Shipbuilding Corporation in March, 1919, was approved on April 9. This plan provided accommodations for 247 first-class passengers, 226 second-class passengers, and 194 officers and crew.

At this conference on April 9 it was decided that the preparation of plans should be apportioned to the three shipbuilders, as follows:

The New York Shipbuilding Corporation to handle structural-steel plans and modifications to the general plans, all calculations such as displacement, cubic capacities, etc., ship carpentry work, cargo-handling gear, bilge and ballast system, insulation, steering gear, winches, windlass, mooring equipment, and canvas gear.

The Bethlehem Shipbuilding Corporation to handle all joinery, deck coverings, furniture, outfit, heating, ventilating and sanitary systems, fire system, and deck piping.

The Newport News Shipbuilding & Dry Dock Co. to handle the refrigerating system, the interior communicating system, and the electric plant.

No provision had been made for the transportation of third-class passengers; and as such accommodations are necessary in the routes to which it was later determined to assign these vessels, the section for second-class passengers was omitted and quarters for 300 third-class passengers substituted. The vessels will carry, in addition, 259 first-class passengers and 215 officers and crew. The steaming radius has been increased, moreover, to 14,000 nautical miles by carrying bunker coal in the No. 5 hold.

Construction work has proceeded steadily, however, from the beginning, as shown by the progress data (Table XVII).

The first three vessels under contract with the New York Shipbuilding Corporation have No. 5 hold filled up with independent tanks, which when filled with bunker oil will give the vessels a steaming radius of about 11,700 nautical miles at 17 knots speed. The first two vessels building at the Bethlehem Shipbuilding Corporation plant have no provision for carrying bunker oil in the No. 5 cargo hold and will have a steaming radius of about 9,800 nautical miles at 17 knots. In all of the other vessels the No. 5 cargo hold is a deep tank, which when used for bunker oil will give the vessels a steaming radius of about 14,000 nautical miles at 17 knots.

As at present designed the ships will carry a cargo deadweight of about 8,000 tons, in addition to about 3,000 tons of passengers and crew, fuel, fresh water, stores, etc., on a mean draft of 30 feet. They can without difficulty maintain a sea speed of 16 knots and have

reserve power to increase this speed to  $17\frac{1}{2}$  knots as conditions may permit. They have the following accommodations:

First class, including settee berths.....	259
First-class passengers' hospital.....	10
Third class.....	300
Officers and crew.....	215
Crew's hospital.....	6
Total.....	<u>790</u>

In addition to these 19 transports 535 feet in length, a contract was awarded to the New York Shipbuilding Corporation for 7 ships 502 feet in length, in accordance with designs prepared by the builder and modified by the Navy Department.

After the signing of the armistice, revisions were authorized to convert the design to a passenger-ship type with provision for cargo also, and as finally approved is arranged to carry 78 passengers. The ships are of approximately 12,000 tons dead-weight capacity, 31 feet 9 inches mean draft, and have a steaming radius of 15,000 nautical miles at 14 knots speed.

#### Agency Yards—The Fabricated Ship.

*American International Shipbuilding Corporation.*—During the fiscal year 34 keels were laid by the American International Shipbuilding Corporation, at Hog Island, 75 hulls were launched, and 67 vessels delivered. A completed vessel has been delivered every five days and this accomplished despite the fact that continual strikes occurred and it was impossible to maintain the necessary working force. Overtime work was not permitted, moreover, except in emergencies.

The last keel was laid on February 2, 1920. Since the beginning 114 hulls have been launched and 93 ships delivered.

The last hull is scheduled for launching July 21, 1920, and the last ship will be delivered before December, 1920, at which time all work in the Hog Island yard will cease. There are now 8 keels on the ways, all nearer completion than the first ships launched early in the program, as it has been proved to be economical in both time and cost to have everything possible done while the ship is on the ways.

Of the Hog Island ships, 110 are 7,500 dead-weight tons capacity, and 12 of 8,000 dead-weight tons. The Navy Department has taken over one of the 8,000-ton ships and it is being converted into an aircraft tender; and while it will be completed as originally designed, the Navy Department will install at the League Island Navy Yard the necessary equipment required for the service to which this ship will be assigned.

The War Department had taken 11 of the "B," or 8,000-ton ships, which will be used as transports, mainly to Honolulu, Manila, and

elsewhere as required, though having no regular route. These are being fitted out at the yard, under the direction of the War Department officials.

At a meeting of the executive committee of the Corporation, held on February 14, 1920, a resolution was adopted by which the Corporation availed itself of the option under the contract with the American International Corporation to purchase the site at Hog Island. The payment therefor has since been made in the sum of \$1,755,735.71, and the property was conveyed by deed to the Corporation as of March 2, 1920. The agent, however, is to continue to occupy the property until the contract of the American International Corporation for building the 122 ships is completed.

The contract with the American International Corporation for building 58 "B" ships has been canceled and settlement effected in satisfaction of all claims in connection with the cancellation of these ships.

*Merchants Shipbuilding Co.*—At the Bristol yard of the Merchants Shipbuilding Corporation 16 keels were laid during the year, 18 hulls launched, and 18 ships delivered, each of 9,000 dead-weight tons capacity.

All keels on the program have been laid at this yard—the last on June 26, 1920—and the last ship on the program of the Corporation will be launched on or about April, 1921.

#### Status of the Work.

The following table shows the progress in the two yards from (1) the beginning to June 30, 1920; (2) during the fiscal year; and (3) a comparison with the fiscal year ending June 30, 1920:

	Keels laid.	Launched.	Accepted.	Delivered.
(1) To date:				
American International Shipbuilding Corporation..	122	114	94	94
Merchants Shipbuilding Co.....	40	30	27	27
(2) Fiscal year 1920:				
American International Shipbuilding Corporation..	134	75	67	67
Merchants Shipbuilding Co.....	16	18	18	18
(3) Fiscal year 1919:				
American International Shipbuilding Corporation..	57	39	27	26
Merchants Shipbuilding Co.....	12	12	9	9

<sup>1</sup> Less than 1919 because all keels under contract had been laid.

Both of the fabricated yards have on hand all the steel and equipment necessary to complete the ships under contract. The labor force has been reduced from 28,000 on June 30, 1919, to approximately 15,000 on June 30, 1920, due primarily to the fact that as each way becomes vacant it is necessary to dispense with the services of many of the workmen on that way.

#### Utility of the Fabricated Ship.

When the Corporation adopted the plan of building fabricated ships and awarded contracts for a total of 390 vessels, representing

2,675,000 dead-weight tons, doubt was expressed in some quarters as to the success of this type of construction, which was a radical change from the accepted methods. It was recognized, however, that by having the hull steel fabricated at the bridge and structural shops throughout the country and then assembled at the shipyards a considerable expansion of the shipbuilding industry was possible.

The program scheduled above was assigned to the three agency yards authorized at that time, as follows:

	Ships.	Dead-weight tons.
American International Shipbuilding Corporation, Hog Island, Pa.....	180	1,385,000
Merchants Shipbuilding Corporation, Bristol, Pa.....	80	540,000
Submarine Boat Corporation, Newark, N. J.....	150	750,000
Total.....	390	2,675,000

This program was reduced by cancellation to 280 ships, of 1,871,000 dead-weight tons, of which 236 ships of 1,524,350 dead-weight tons had been delivered on June 30, 1920.

As many of these vessels have been in continuous service a long time, it is now possible to review the performance of the fabricated ship from the standpoint of the operator.

The principal difference between this type and the ships built in the customary way lies partly in the design of the hull, the use of standard shapes for framing, and the method of laying out and assembling the parts. Any unusual operating difficulties which could be attributed to the principle of the fabricated ship would of necessity involve the hull, yet no unusual repairs or alterations to fabricated hulls have been required. These ships have proved equally as serviceable as others of the fleet, and their utility as cargo carriers has been established.

The use of standard parts in the construction of these vessels has simplified the problem of repairs, whether of a minor nature or extensive in scope. The case of the steamship *Liberty Glo* is an interesting example.

This ship, which was built at Hog Island, struck a submerged mine off the coast of Holland on December 5, 1919, and was beached. On the following day she broke in two during a gale and high sea and the forward part dragged anchor and drifted 2 miles down the beach. The after section was salvaged and berthed in Rotterdam.

The question of disposing of the hull and machinery as junk or of building a new forward part was then considered, and the latter course was adopted. On May 13, 1920, the forward section was ordered from the builders and was loaded on the steamer *Honnadaga* on June 26, 1920, for shipment to Holland. This material included hull steel, rigging, winches, mast, booms, anchors, chains, and other auxiliary equipment, and on arrival in Holland will be assembled and built to the after section of the ship.

**PASSENGER TRANSPORTATION AND HOUSING.**

The Division of Passenger Transportation and Housing, created under the authority of the act entitled "An act to authorize and empower the United States Shipping Board Emergency Fleet Corporation to purchase, lease, requisition, or otherwise acquire, and to sell or otherwise dispose of improved or unimproved land, houses, buildings, and for other purposes," approved March 1, 1918; and provided with an appropriation of \$75,000,000 for housing and \$20,000,000 for transportation facilities by the sundry civil appropriation act approved July 1, 1918, has practically completed its construction program during the fiscal year ending June 30, 1920.

The entire housing program included the construction of 8,644 individual houses, 94 dormitories (Table XVIII), 849 apartments in 92 buildings, 5 hotels, and 6 boarding houses, together with cafeterias, stores, power houses, and other miscellaneous buildings, as indicated in Table XIX. The work included also the installation of public utilities and the construction of streets and public sidewalks at the various housing projects, all of which were found to be required for the service of 24 shipyards and one turbine plant. The totals given above represent a somewhat modified program, due to cancellations effected upon the signing of the armistice.

In order to carry out this program the Corporation advanced money on very liberal terms to local realty companies or housing companies, organized by the shipbuilder concerned, to construct houses on land owned by them, taking back from the local realty companies mortgages covering the amount of the houses in each case. These mortgages stipulated that, in case the realty companies were unable to pay the Corporation its mortgage interest, the mortgages would not be foreclosed until after two years had elapsed, in case the war should not terminate before that time, and that the principal should be paid back to the Corporation at the rate of 3 per cent per annum, beginning after the expiration of two years; also providing for a write-off for the excess war cost, reducing the mortgages by an amount equal to the excess cost resulting from carrying out the work under the pressure of war conditions.

After the signing of the armistice the Corporation endeavored to liquidate all of the moneys advanced for war purposes, including the sums advanced under these mortgages, and it has been necessary to negotiate with the shipbuilders concerned with a view to making new agreements by which the shipbuilder shall either purchase the housing projects outright from the Corporation, for cash or cash and deferred payments, or to obtain the builders' consent to transfer to the Corporation the land on which the houses are built. These negotiations are necessary before the Corporation is in position to offer the houses for sale.



Loans have been made to public utility companies to cover part of the cost of installation in connection with certain projects. These loans bear interest at the rate of 5 per cent per annum. (Table XX.) Municipalities which furnished public utility facilities and the approximate commitments therefor are listed in Table XXI.

As the building program has been entirely completed, with the exception of a few items of sewer repair, street paving, and the correction of minor defects of construction, an entirely new problem confronts the Corporation. This consists of the supervising management of operations and maintenance of the various housing problems until the absolute title is acquired and all the properties are ultimately disposed of.

At the beginning of the fiscal year the Corporation actually owned only six projects, viz :

	Houses.	Hotels.	Apart-ments.	Dormi-tories.	Cafe-terias.	Power houses.
St. Helena, Md.....	296					1
Elmwood, Philadelphia.....	1,989			16	4	1
Harriman town site, Bristol, Pa.....	320	1	212	56		
Chestership Hotel, Chester, Pa.....		1				
Essington Dormitories, Essington, Pa.....				3		
Quantico, Va.....	112					

<sup>1</sup> 362 houses which were requisitioned during the war were sold during the fiscal year.  
<sup>2</sup> Cottages.

All other housing projects were owned by realty companies whose capital stock was issued to the several shipbuilders in payment for the actual cost of the land on which the housing projects were constructed. The capital stock of each realty company was pledged by said shipbuilders with the Corporation as security for the faithful application of funds advanced by it under mortgages for the construction of the various projects. During the fiscal year ending June 30, 1920, the Corporation became the owner of six housing projects (on which it held mortgages) by the acquisition of the capital stock of the following realty companies :

Date.	Company.	Houses.	Hotels.	Board-ing houses.	Apart-ments.	Dormi-tories.	Cafe-terias.
1919.							
Sept. 13.....	Groton Park Real Estate Co., Groton, Conn.....	92		3		4	1
1920.							
Jan. 15.....	Liberty Housing Co., Dundalk, Md.....	529		2			
Feb. 20.....	Fairview Realty Co., Camden, N. J.....	1,578	1		56		
May 25.....	Chester Emergency Housing Corpora-tion, Chester, Pa.....	278		1	106		
June 17.....	Federal Home Building Co., Lorain, Ohio.....	233			8		
17.....	Wyandotte Home Co., Wyandotte, Mich.....	79					

In this same year the following projects have been sold, viz :

	Houses.	Boarding houses.	Dormitories.	Cafeterias.	Power houses.
St. Helena, Md.....	296			1	1
Elmwood, Philadelphia.....	1,627		16	4	1
Port Jefferson, Long Island.....	9		1	1	1
Dundalk, Md.....	529	2			
Quantico, Va.....	* 12				
Manitowoc, Wis.....	100		1		

\* 862 houses which were requisitioned during the war were sold during the previous fiscal year.

† Cottages.

Considerable progress has been made in renting the houses and apartments in the various projects. The following is the percentage of occupancy at the close of the fiscal year: Houses, 94.17 per cent; apartments, 93.88 per cent; stores, 90 per cent.

At the close of the preceding fiscal year the percentage was: Houses, 76.18 per cent; apartments, 72.90 per cent; stores, 44.68 per cent.

By resolution of the board of trustees, United States Shipping Board, approved June 24, 1920, the name of the Division of Passenger Transportation and Housing was changed to the Division of Transportation and Housing Operations. It is intended that this division shall be a self-supporting division of the Corporation and it is estimated that an annual net income of approximately \$1,000,000 will be turned over to the United States Treasury.

The work has been completed within the amount of the original authorization, and, in fact, a substantial balance will remain unexpended, as shown in the statement of total commitments, Table XXII.

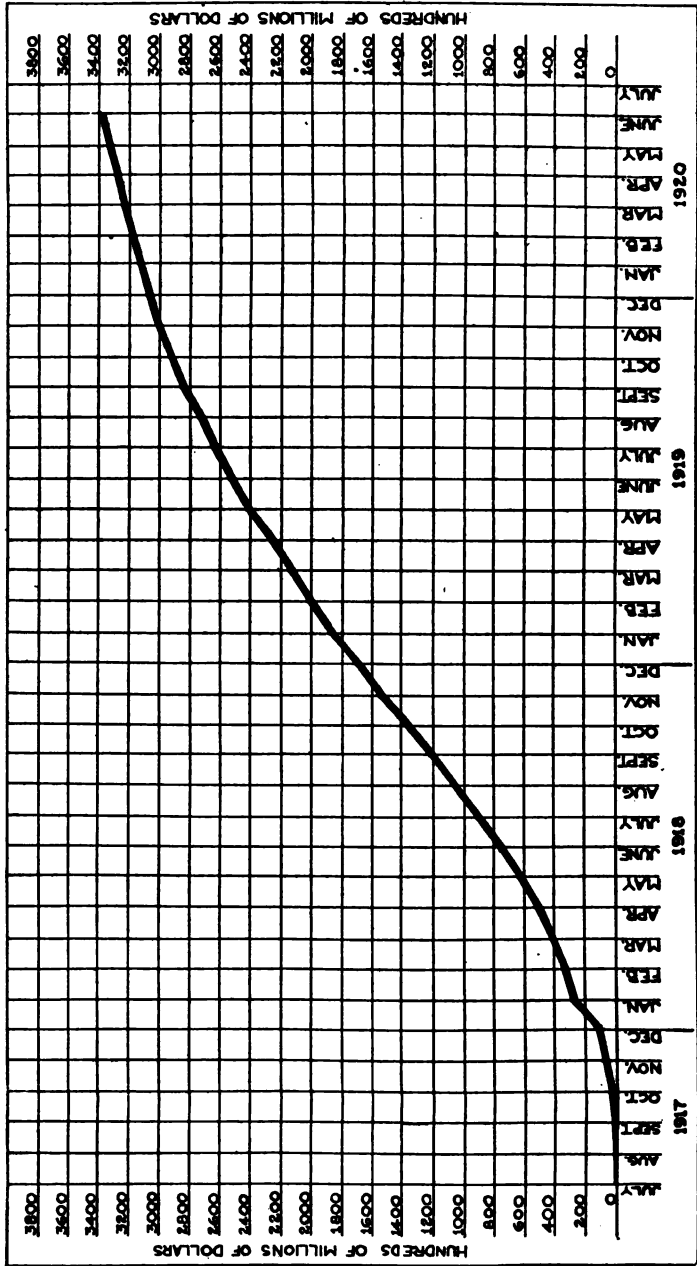
Details of housing contracts and expenditures, as required by act of Congress approved March 1, 1918, are contained in Table XXIII.

The shipyards were generally located off the lines of transportation, or in sections where transportation facilities were inadequate, and it was necessary to advance money to street railway companies to extend and improve the lines serving the yards.

For the purpose of carrying out the program the sum of \$20,000,000 was appropriated, but \$8,000,000 of this amount was subsequently returned to the Treasury Department.

All companies with the exception of the few that have gone into bankruptcy are paying the Corporation interest at the rate of 5 per cent on the total amount of the advances. It is also agreed that after the declaration of peace the Corporation shall be reimbursed the appraised value of the improvements subject to a maximum depreciation of 25 per cent. A period of five years has been allowed in most cases for this settlement, payment in annual installments. The

EMERGENCY FLEET CORPORATION  
TOTAL EXPENDITURES



security held by the Corporation for these advances is shown by Table XXIV.

The Corporation has endeavored to expedite these settlements in order to close the accounts at an early date, but the financial condition of many of the companies and the general credit situation have made it impossible to obtain any terms satisfactory to the Corporation.

During the fiscal year all construction work has been completed, and approximately \$50,000 yet remains to be paid on outstanding obligations. No new contracts were awarded during the year, and no items of construction were continued which were not essential to the utility of the lines. List of contracts awarded is contained in Table XXV.

While the extension of railways and purchase of equipment were authorized to meet the emergency requirements due to the demands of the war program, it has developed that in practically every case the facilities are now needed in the communities served. Street railway companies have been seriously handicapped in adequately maintaining their properties and purchasing necessary equipment, and a high utility value is attached to the improvements provided by the Corporation.

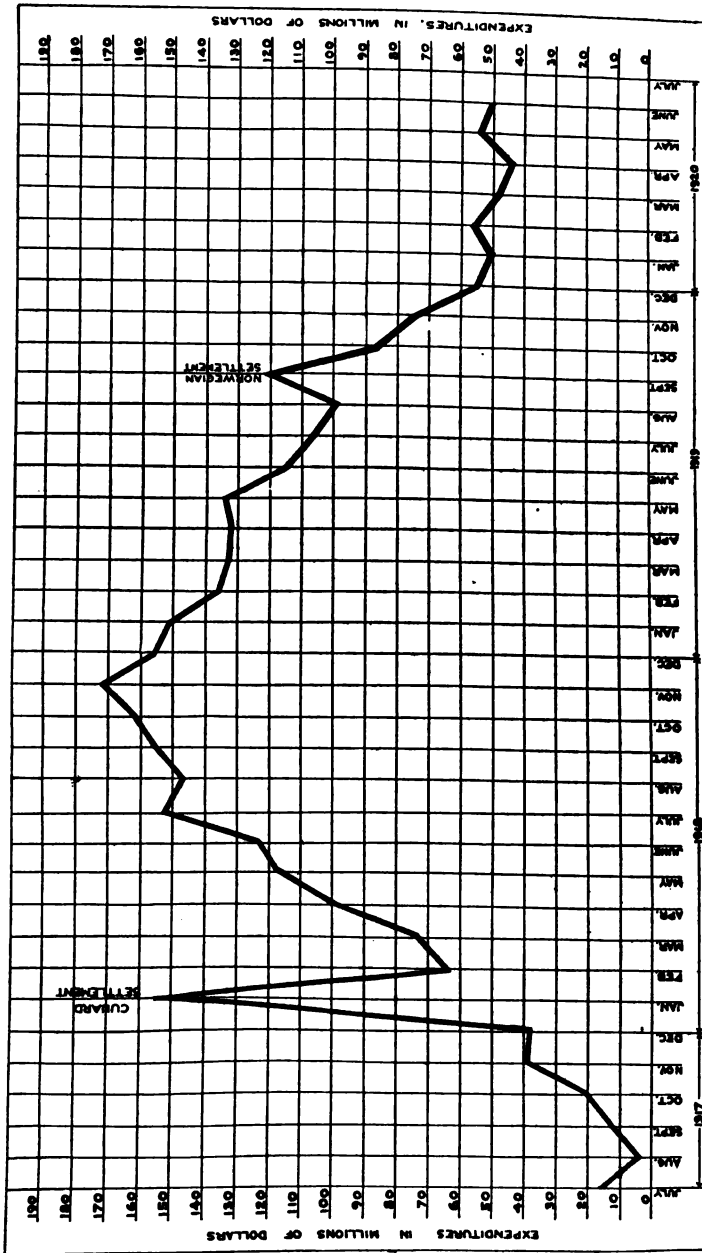
#### AUTHORIZATIONS AND APPROPRIATIONS.

Prior to September, 1919, the finance division was a part of the Construction Division, reporting to the vice president in charge of construction, but was transferred then to the jurisdiction of the general comptroller and removed to Washington in February, 1920. A statement covering the financial administration will be found elsewhere in this report.

The authorized expenditures and actual appropriations are shown in the following table:

	Authorizations.	Appropriations.
<b>Requisitioned ships:</b>		
Urgent deficiency act No. 23, June 15, 1917.....	\$250,000,000.00	\$150,000,000.00
Urgent deficiency act No. 64, Oct. 6, 1917.....	265,000,000.00	200,000,000.00
Sundry civil appropriation bill No. 181, 1919.....		65,000,000.00
	515,000,000.00	415,000,000.00
<b>Withdrawn by Shipping Board.....</b>		39,705,958.35
Balance of fund.....	515,000,000.00	375,294,041.65
<b>Contract ships:</b>		
Urgent deficiency act No. 23, June 15, 1917.....	500,000,000.00	250,000,000.00
Urgent deficiency act No. 64, Oct. 6, 1917.....	734,000,000.00	250,000,000.00
Sundry civil appropriation bill No. 181, 1919.....	1,650,000,000.00	1,438,451,000.00
	2,884,000,000.00	1,938,451,000.00
<b>Less amount set aside for dry docks and marine railways, urgent deficiency act No. 233, Nov. 4, 1918.....</b>		34,662,500.00
	2,884,000,000.00	1,903,788,500.00

EMERGENCY FLEET CORPORATION  
EXPENDITURES



	Authorizations.	Appropriation.
<b>Plant and property:</b>		
Urgent deficiency act No. 64, Oct. 6, 1917.....	35,000,000.00	35,000,000.00
Sundry civil appropriation bill No. 181, 1919.....	87,000,000.00	87,000,000.00
	<b>122,000,000.00</b>	<b>122,000,000.00</b>
<b>Housing act:</b>		
Housing act, Mar. 1, 1918.....	50,000,000.00	.....
Sundry civil appropriation bill No. 181, 1919.....	25,000,000.00	75,000,000.00
	<b>75,000,000.00</b>	<b>75,000,000.00</b>
<b>Transportation:</b>		
Sundry civil appropriation bill No. 181, 1919.....	20,000,000.00	20,000,000.00
<b>Dry docks and marine railways:</b>		
Set aside from contract ships by urgent deficiency act No. 233, Nov. 4, 1918.....		34,662,500.00
<b>Foreign ship construction:</b>		
Sundry civil appropriation bill No. 181, 1919.....	55,000,000.00	55,000,000.00
<b>General:</b>		
(A) Sundry civil appropriation bill, 1920.....	<sup>1</sup> 120,000,000.00	356,000,000.00
(B) Sundry civil appropriation bill, 1920 <sup>2</sup> .....		118,000,000.00
	<b>120,000,000.00</b>	<b>474,000,000.00</b>
Subtotals.....	3,551,000,000.00	3,059,745,041.65
Capital stock.....		50,000,000.00
Grand total.....	<b>3,551,000,000.00</b>	<b>3,109,745,041.65</b>

<sup>1</sup> Decrease.

<sup>2</sup> Covers balance of appropriation of \$150,000,000 for ship purchases made for the Operating Division, \$32,000,000 of which has already been expended. The balance of \$118,000,000 available for ship construction.

#### ORGANIZATION.

The difficulties which confronted the Corporation during 1917 and 1918 in the task of forming a working organization to carry out the building program were followed in 1919 and 1920 by the problems presented by the necessity for disbanding the force without sacrificing the interests of the Corporation. The momentum of the ship-building industry was almost irresistible at the time of the armistice. It had been encouraged by every means possible in our effort to build the bridge of ships, and an army of 385,000 men was at work under the guidance of the home office and district offices, with a total of 8,273 employees whose annual salaries amounted to \$14,469,687.

A review of the activities of the Construction Division is characterized by the promptness with which the Corporation undertook to reverse the former process. As the industry was no longer a war-emergency measure, the work of the camouflage branch, national service section, publication branch, and similar activities was discontinued as soon as this could properly be done. Other interests of the Corporation, such as those in the industrial relations group, health and sanitation, safety engineering, and education and training, which were of vital importance during the war, were contracted in scope as rapidly as possible and finally abolished.

By August, 1919, changes of this nature had reduced the personnel to 5,258 and the annual salary roll to \$11,176,003, a net saving of \$3,293,684. The Corporation then was more nearly on a peace-time

basis, but the changes had left the remaining branches of the work somewhat disconnected. This condition, moreover, was partly due to the policy of cancellation of ship contracts which had reduced the program at that time nearly 25 per cent. It was apparent that consolidation and the elimination of duplication and nonessential work were necessary to perfect the organization.

For the purpose of carrying out this program, an investigation was made by committees in the home office and in the districts, and as a result of this survey the annual pay roll was reduced by \$1,203,000 in less than two months. On January 31, 1920, reductions since the preceding August had been made as follows:

	Employees.	Annual salaries.
Home office.....	807	\$1,464,665
Districts.....	1,317	2,705,823
Total.....	2,124	4,170,488

In connection with this reorganization, savings incidental to the reduction in the working force was effected as follows:

Forms and reports declared obsolete.....	1,236
Typewriters declared surplus.....	710
Telephones removed.....	203
Office furniture and equipment declared surplus, pieces.....	19,139
Automobiles declared surplus.....	318

Attention was also directed to the work in shipyards holding cost-plus contracts, and this review resulted in a considerable reduction in expenditures.

#### Transfer of Divisions.

Radical changes in the organization were also made during January and February, which removed to the jurisdiction of the chairman's office the following branches of the Construction Division:

	Number of employees.	Annual pay roll.
Supply and Sales Division:		
Home office.....	213	\$718,390
Districts.....	655	1,335,754
Cancellation board:		
Home office.....	16	50,990
Districts.....	38	108,740
Plant protection:		
Home office.....	6	13,120
Districts.....	19	42,192
Legal division:		
Home office.....	87	198,440
Districts.....	8	28,720
Plant disposal.....	4	12,780
Industrial relations:		
Home office.....	4	10,160
Districts.....	3	10,320
Total:		
Home office.....	330	1,008,570
Districts.....	723	1,517,728
	1,053	2,526,298

**Changes in the Organization.**

On February 1, 1920, steps were taken to consolidate the branches of the former Division of Construction and the Construction and Repair Department of the Division of Operations, both at the home offices and in the districts.

A meeting of the district managers of the former Division of Construction was called on February 6, 1920, at Philadelphia, at which each district manager was instructed to confer with the chief inspector of the Construction and Repair Department in his district with a view to setting up in a tentative manner the new organization. Consolidation of the activities was ordered along these lines:

All activities not pertaining strictly to construction are to be transferred when practicable to the proper division of the Emergency Fleet Corporation to which they belong.

The duplication of activities existing in the organizations of the Division of Construction and of the Construction and Repair Department of the Division of Operations is to be eliminated.

Amalgamation of forces to effect economy in office space is to be carried out without delay.

A realignment of districts has been adopted to conform to those established by the Division of Operations. The chart which accompanies this report indicates the location of the district offices.

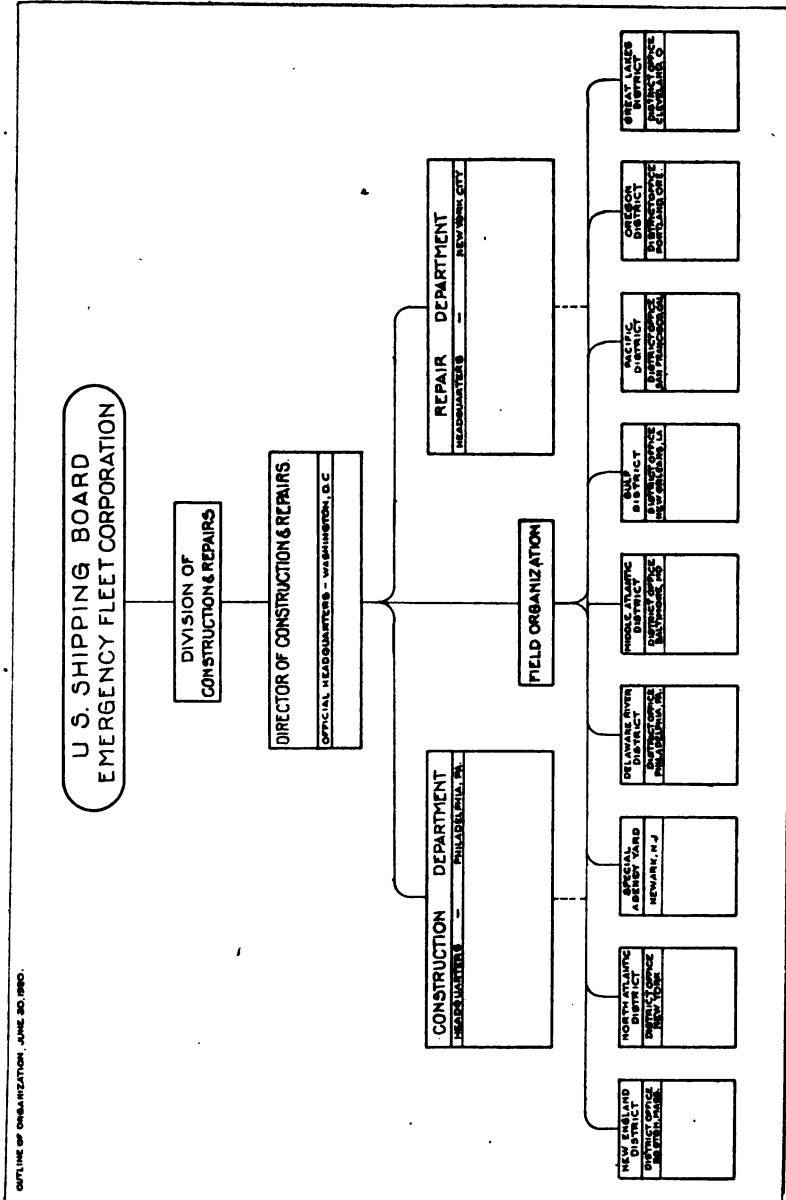
**REPAIR DEPARTMENT.**

While the activities of the construction department have decreased during the year, due to cancellations and the progress toward completion of the program, the work of the repair department has expanded because of the increase in the size of the fleet in operation and the transfer from the War and the Navy Departments of the ex-enemy vessels.

The functions of this department, however, have not been limited to repair work, but have included review of designs for ships under construction, preparation of designs for large cargo vessels, approval of plans for passenger ships, acceptance for the Division of Operations of completed tonnage, survey of vessels to establish tonnage ratings, and the reconditioning of ex-enemy vessels. Although the first two of these functions are no longer exercised because of completion of those duties, the remainder of the work has increased in importance and volume to such an extent that this department now forms with the construction department one of the two divisions of the Corporation.

Until the latter part of the year 1918 the repair work of the Division of Operations was under the supervision of the marine superintendent at Washington and the Board of Survey and Consulting Engineers at New York City, which was organized in April, 1917,





primarily for the purpose of repairing the ex-enemy vessels acquired when the United States entered the war.

At that time, however, supervision over repair work had been largely delegated to other agents, as the responsibility for maintaining the ships in satisfactory condition rested with the managing agents under the following clause of that form of contract:

The manager shall procure "for and on behalf of the Corporation the necessary labor and material to effect ordinary running repairs and replacements. No extraordinary repairs or expense shall be made or incurred and no alteration in hull, machinery, or equipment shall be made by the manager, except in serious emergency, without first securing in writing the authorization of the Corporation." On account of the rapid increase in the number of ships in operation in the latter part of the year 1918, with the resultant increase in the extent of the repair work, and also because of the necessity for certain changes in future construction, which became apparent after the ships were delivered and placed in service, the Construction and Repair Department of the Division of Operations was organized November 11, 1918, with the following functions:

(a) Design and new construction section.

Review of the designs for the various types of vessels under construction to effect improvements from the standpoint of the operator, and the preparation of new designs for large cargo carriers.

(b) Inspection and acceptance section.

To cooperate with the Construction Division in conducting trial trips.

(c) Repair section.

To assume, at a later date, control and direction of repair work to vessels in service.

**Design and New Construction.**

The character of the fleet as represented by the contracts awarded was determined by the various types which the yards were accustomed to build and the ships reflected the ideas of the many builders and operators. The Corporation had developed but few designs, and there was no opportunity to select the best of existing types and to confine the contracts to them. This action, moreover, would have impeded the progress of the work and therefore could not be considered.

After the armistice was signed, however, and the demand for ships for war purposes had passed, steps were taken at once to utilize the experience of the Division of Operations and improve the fleet so that our merchant marine would not be handicapped in the carrying trade of the future.

An examination of all plans was accordingly begun by both the home and the field offices, and the necessary changes authorized in all

cases when the ships were not yet laid down and also when ships were on the ways and construction had not proceeded too far. Faults causing difficulties in connection with the operation of ships in service were corrected in ships on the construction program.

By September, 1919, the examination of the plans had been completed and further work was discontinued.

While these modifications in the original designs involved additional expense, they were adopted as a result of the experience of the Division of Operations, and have improved the fleet as a commercial asset to the country. The cost of the work, moreover, has been more than offset by the economies in operation which they introduced.

Although the work incident to review of design has been discontinued in respect to the ships building by the corporation, examination of designs submitted by private owners has already commenced in connection with shipbuilding by those desiring to take advantage of the opportunity offered in section 23 of the merchant marine act, 1920, approved June 5, 1920. This authorizes deductions from net income subject to war-profits and excess-profits taxes, of amounts equivalent to the net earnings of vessels, provided such amounts are reinvested in the building of new ships of type approved by the Shipping Board.

New designs were prepared by the Corporation for cargo vessels of the larger type ranging from 10,000 to 15,000 dead-weight tons capacity, and it is believed that these plans provide the most advantageous arrangements possible for economical operation.

Plans also have been prepared for a 12,000 deadweight ton tanker of a new type, with expansion trunks at the side and the center space arranged for general cargo. Improved quarters for the crew are provided by subdividing the space into small rooms instead of assigning the crew to one large room in the customary way. The mess rooms for officers and crew have been placed adjacent to the pantry and galley, thus affording a more convenient arrangement. This tanker design is considered an improvement over the vessels in service and provides better accommodations for the crew.

This section of the repair department has cooperated with the construction department, moreover, in the revision of plans for the conversion of the troop ships to passenger vessels now under contract.

#### **Inspection and Acceptance.**

Since January, 1919, the Construction and Repairs Department has rendered assistance to the Construction Division in connection with trial trips and the acceptance of new tonnage, and has been represented on the trial boards. The tonnage built by the Corporation has always been subjected to thorough tests before delivery, which were designed to disclose any defects either in hull or ma-

chinery. A uniform improvement in workmanship has been noted, and it is frequently the case that acceptance of the vessels is made at the conclusion of the trials.

The scope of these trials covers all factors entering into the construction and efficient performance of all new ships, the purpose being to develop and correct any items of unsatisfactory workmanship or omissions and to improve the arrangement of machinery, piping, or cargo-handling gear whenever this would increase the efficiency of the ship from an operating standpoint. Before the trials are conducted all vessels are equipped ready for sea and all wood ships are docked, recaulked, seams cemented, and underwater body given two coats of copper paint; steel ships are docked and cleaned if more than 42 consecutive days have elapsed since launching or last docking, and the vessel has not been lying in fresh water during that period. This procedure permits an examination to be made of the hull.

(1) *Dock trial*.—A dock trial of six consecutive hours is first conducted with vessel in ballast condition, during which a preliminary survey is made to test the integrity of the machinery, tightness of joints in piping, and satisfactory installation of equipment.

(2) *Full-power trial*.—After the conclusion of a satisfactory dock trial all vessels (except those built on the Great Lakes and bulk-oil tankers) are given a continuous six-hour full-power trial away from the dock. Bulk-oil tankers are loaded with water ballast to deep water load line and the trials then conducted. In connection with the lake vessels this trial may be made coincident with the dock trial.

These tests develop the maneuvering qualities of the ship in light condition, also the integrity of windlass and anchors, winches, steering gear, boilers, turbines, auxiliaries, evaporators, pumps, condensers, etc.

During this trial the ship is stopped, both anchors dropped, and all chain run out to permit examination of fastenings, after which both anchors are hove up at the same time to prove the capacity of windlass engine.

If these two trials develop no defects to be corrected, the ship is then delivered conditionally, subject to the third trial after loading with cargo.

(3) *Continuous full-power sea trials*.—In the case of a steel vessel a 12-hour continuous full-power sea trial (for wood ships 24 hours) is conducted as a test under full-load conditions. All machinery, auxiliaries, and equipment are again tried out under actual conditions in service. In all new ships there are some rivets which are loose or need calking, and this develops when the ship is loaded

and at sea for the first time. Defects discovered during this trial are usually of such minor nature that correction is often postponed until the ship returns from the voyage.

During this trial the fuel and water consumption, loaded speed, propeller efficiency, and steam generating capacity are determined.

At the satisfactory conclusion of these trials final acceptance of the ship is issued.

In the period of 12 months ending June 30, 1920, acceptances were made of 982 ships, all of which were subjected to the dock trials and light trials, and 803 were given the loaded test at sea. The remainder, 179 ships, were built on the Great Lakes, and as they can not proceed to the coast at loaded draft the long trip in light or partly loaded state is considered equivalent to the regular 12-hour trial.

While construction is in progress, moreover, the work is under constant supervision of the Corporation inspectors and representatives of the classification societies. The results of these precautions to obtain good workmanship are reflected in the favorable reports when surveys are made to determine the extent of running repairs.

These surveys are always made when ships are delivered to managers for operation under the new form of agreement, in order that the extent of repairs may be fixed and the physical condition of each ship may be made a matter of record. This is used for reference purposes during the time the ships are in the hands of the companies responsible for their care. Surveys are also made from time to time subsequently to ascertain whether they are maintained in good condition and are not permitted to deteriorate through neglect.

In addition to the regular inspections a special survey is conducted when damage to ships results from collision, heavy weather, stranding or other causes. This examination is made in conjunction with inspection by the classification societies and Insurance Division to establish the extent of damage, the repairs necessary, and also to fix the responsibility.

Approximately 1,500 surveys were made during the fiscal year, and it has been established beyond doubt that the Shipping Board vessels, with very few exceptions, are fully equal to the average standard of commercial ships and are maintained in as good condition as the ships of any private company.

#### **Repairs.**

Responsibility for the proper maintenance of the vessels in service originally rested with the companies managing the ships for the Division of Operations. On account of the increasing importance of the repair work and the volume of expenditures which it represented completed, jurisdiction over these activities was given to the Construction and Repair Department April 30, 1919. As loss of time in

port involves financial loss in the operation of ships, the system for the repair work was decentralized in accordance with the general policy of the Division of Operations. Representatives in the various districts were authorized to conduct negotiations and to award contracts so that the repairs could be made while ships were taking on and discharging cargo and the delays thus reduced to a minimum.

Under the regulations issued on that date all requests for repairs desired by managers of the ships must be submitted to the representatives of the Corporation in the district where the ship is docked and be properly authorized before work is commenced, otherwise no obligation is assumed by the Corporation. In all cases the necessity for the repairs and extent thereof are determined before approval is given. Competitive proposals are obtained whenever possible, and all additional work must be authorized in the regular way.

The cost-plus form of contract, which had been used occasionally when the nature of the repairs made it difficult to prepare an estimate in advance, was entirely discontinued.

In carrying out the repair work three forms of contract have been used, as follows:

(a) *Time and material contracts.*—This form of contract is known as “commercial” and is used when the extent of the work required is of a character more or less indefinite. This condition frequently arises in ship repairs when defects in turbines, machinery, riveting, etc., occur and, under the circumstances, estimated costs are difficult to prepare. Effort is made to distribute this work equally among the yards properly equipped and located.

(b) *Lump-sum contracts.*—This form is used under the same conditions, generally, as the “commercial” contracts, but a lump-sum price for the work is made and agreed upon instead of unit rates. Most of the “extras” or items of additional work not foreseen when the first contract is awarded are usually authorized in this way.

(c) *Formal contracts.*—These are awarded after the work has been placed on the market and competitive proposals obtained.

Running repairs after a voyage are generally of a minor nature, and to avoid undue delay in preparing formal contracts for such work it has been the custom to allow the work to be done on time and material basis if the cost does not exceed \$5,000 and the charges are at commercial rates.

In actual practice, however, competitive proposals are obtained in most of these cases when the cost is estimated to exceed \$3,500 and the nature of the work and time available for repairs will permit. Otherwise, lump-sum contracts are awarded.

It has been further provided that vessels will be dry docked every eight months and inspection made to determine the condition of underwater parts.

This new system has had many advantages over former methods in that it established direct dealing between the Corporation and the repair contractors, placed with the Corporation the responsibility of establishing the necessity for the repairs, the extent of expenditures, satisfactory compliance with the contract requirements, and also expedited the completion of the work, thus reducing the number of days lost while in port.

Before repair work is authorized careful investigation of the condition of the ship is first made representatives of the Corporation, who visit the ship on arrival at port and make an inspection in company with a representative of the operator. Consideration is given to the importance of the work and most efficient method of performing it. A formal request for the repairs from the operator is then approved if in the opinion of the Corporation the expenditure is justified. In most cases specifications are then prepared and the work put on the market.

As time for completion is an important element, a date is usually fixed for the performance of the work, and daily reports of the progress made are prepared in order that all delays may be avoided. Where it is not possible to prevent this it has generally been found that the fault was due either to inability of operators to remove cargo promptly or to the necessity for underwater repairs not known until the vessel was dry docked.

#### **Turbines and Tankers.**

Turbine machinery is a type of special construction which can not be repaired successfully by yards unfamiliar with their design, and on this account repair work of this class is awarded only to firms experienced in this line.

On account of the constant service required of tankers, it has been necessary to avoid altogether, whenever possible, the loss of time incident to the execution of repair contracts. Under the circumstances these repairs are promptly made by firms designated by the Corporation. In this selection consideration is given to the possibility of having the work done immediately and the general efficiency of the yard, governed in all cases by the desire to distribute the work uniformly among those yards equipped to undertake the contract.

#### **Competition.**

Active competition has been obtained on the work placed on the market, and all yards have shared in the contracts of the different types. When repairs are of such nature that dry docking is required the field for competition is reduced to the number of yards having such facilities, but less than half of the number of contracts awarded require dry docking, although regular docking every eight months is necessary for all ships.

**Deep Tank Installation.**

Although the principal part of the work under the control of the department consists of repairs, it is frequently necessary to install additional equipment on ships in service to improve operating conditions.

Due to the scarcity and the excessive cost of fuel oil in foreign ports, it was deemed advisable in the cases of oil-burning vessels in the foreign trade to make provision to carry sufficient fuel to make complete round trip voyages without the necessity of refueling except at the home port. For this purpose, vessels having deep tanks for water ballast were converted in such a manner that these tanks could be used for carrying fuel oil on the outward voyage and could also be used for carrying cargo on the return voyage if the cargo was available. In view of the saving effected due to these conversions, the expenditure required has been fully justified.

**Electrically Driven Vessels.**

The steamship *Eclipse*, a vessel of about 12,000 dead-weight tons, 450 feet in length, 3,000 shaft horsepower turbine drive, is now being fitted with an electric-drive installation. This ship is a cargo carrier of the best type and is one of twelve which will be similarly converted. These changes in propulsion mark the beginning of a distinct era in the history of the American merchant marine, and the result will be watched with interest.

**Inspection.**

A corps of inspectors is maintained in each of the district offices to inspect all work performed on United States Shipping Board steamers, and one inspector at least is on duty continuously at each large repair yard. Other inspectors are detailed to the district office each day for assignments on special surveys and reports. One inspector is detailed to each ship being repaired on a contract basis to keep an accurate check on the material and workmanship and on the time of starting and completing the contract.

There is a special section in the New York office of the department responsible for the upkeep of turbines and gears and incidental repairs to this equipment in all Shipping Board vessels.

**Use of Navy Yards.**

It is the policy of the Corporation to place a very considerable volume of work in the navy yards, and satisfactory arrangements have been made with the Navy Department for this purpose in accordance with the following opinion by the solicitor:

Vessels owned by the United States Shipping Board Emergency Fleet Corporation and chartered to a private party are to be classified for the purpose of repairs by navy yards as private vessels, provided the charter party requires the charterer to keep the vessel in repairs during the term of the charter. If the



cost of repairs falls upon the Emergency Fleet Corporation, the vessel is to be treated as belonging to a coordinate branch of the Government.

Methods of handling the work referred to in the last paragraph are set forth in the following excerpts from general orders:

Upon request from the United States Shipping Board (Division of Construction and Repair) that the Navy consider the specifications and plans for work on a Shipping Board vessel, incident to a general overhaul and estimating thereon, the Chief of Naval Operations will, after consultation with the bureaus and consideration of the probable effects on scheduled naval work, designate the navy yard to prepare estimates on the work involved.

If the proposed work is allotted to the Navy, necessary instructions will be issued by the Secretary of the Navy making the vessel available for the work requested by the Shipping Board.

For the purpose of these instructions, emergency work is to be defined as urgent repairs, requiring not more than six days to complete.

Commandants of such navy yards as within the continental limits of the United States are authorized to undertake emergency work which may be requested by duly authorized Shipping Board authorities without referring to the Navy Department, except in the following instances:

- (a) When dry-docking is involved.
- (b) When the work in question would interfere with the present or prospective naval work at the yard.

In such instances the commandant will report to the Chief of Naval Operations for instructions, reporting the estimated time required to effect repairs, estimated time in dry dock, and to what extent the work in question would interfere with scheduled naval work.

In instances where dry-docking alone is involved, commandants will confer with the Bureau of Construction and Repair for necessary authority.

In general, the cost of work chargeable to the Shipping Board is to be the total charge against naval appropriations for the work involved less the pay of naval officers at the yard and the depreciation on navy-yard property. This basis of accounting was put into effect March 1, 1920.

The Shipping Board representatives will be given the fullest latitude in inspecting progress of work under way, on the ship or in the shops.

#### **Jurisdiction of Managers of Ships.**

Under the new form of agreement with managing agents, responsibility for the condition of ships and jurisdiction over repairs was again delegated to the managing agents in the new contract, of which the following is an excerpt:

The agent shall (subject to such regulation or methods or supervision and inspection as may be required or prescribed by the Corporation) exercise reasonable care to maintain the vessel in a thoroughly efficient state in hull, machinery, tackle, apparel, furniture, and equipment, procuring for and on behalf of the Corporation the necessary labor and material to effect ordinary running repairs and replacements. No extraordinary repairs or expenses shall be made or incurred and no alterations in hull, machinery, or equipment shall be made by the agent, except in cases of serious emergency, without first securing in writing the authorization of the Corporation.

As the new contract supersedes the old form whenever it expires in each case, the functions of the repair department have gradually decreased.

**Contract with United States Bureau of Survey.**

On account of the increasing number of ships in operation under the new managing agreements, it was deemed advantageous to assign supervisory control over the work to an agency acting for the corporation, and accordingly on April 15, 1920, a contract was executed with the United States Bureau of Survey whereby the bureau undertakes to carry out the following work in connection with steel vessels only, after July 1, 1920:

To conduct all condition surveys.

To check all requisitions and invoices for customary voyage repairs not exceeding \$10,000 in cost, and also for work exceeding that amount under instructions from the Corporation.

To maintain a record of repairs to each vessel.

To render such other services in connection with rebuilding or designing as may be directed.

Compensation for these services is fixed at definite rates per survey, varying with the size of the ship, subject to a maximum rate per year.

The surveys which the bureau has undertaken to conduct or may be called upon to make may be described as follows:

*Regular surveys.*—To determine the necessity for and extent of all repairs desired by the managing agents.

*Periodic surveys.*—To be made at least three times a year on each ship to ascertain whether the vessels are being maintained by the managing agents in good condition.

*Special surveys.*—To furnish the Corporation at any time information as to the condition of a vessel, its machinery, or equipment.

*Damage surveys.*—To fix the extent or damage and responsibility therefor in connection with adjustment of insurance.

*Survey on change of managing agents.*—To determine the condition of the ship and necessity for repairs.

*Survey on claims against builders.*—To determine actual conditions prior to commencement of repairs as a basis for adjustment.

Cooperation between the managing agents and the bureau is provided by the following procedure:

*Repairs to steel vessels.*—Under provisions of agency agreement M-03, the agent will prepare necessary plans and specifications and control, supervise, and direct repairs, inspection thereof, and negotiations with contractors; approval of requisitions, together with approval of bills, subject to check, approval and assignment to proper account by the bureau, in connection with such repairs to any steel vessel under his management, when it is estimated that cost of such repairs will not exceed, or until it is found that they will exceed in the aggregate \$10,000 during a particular time of call at any port of continental United States, or \$1,000 at any other port: Replacements, renewals or major repairs to hull or machinery (turbines, gears, and propellers), in all cases shall be referred to the bureau for necessary authority from the repair department before commencement of the work.

*Copy of work lists to the bureau.*—When the agent places orders or contract for work, he will, in every instance, forward within 24 hours from commence-

ment of work to the nearest representative of the bureau a copy of the work list or orders, indicating contractor to which work is awarded, date of commencement, estimated cost of each item.

*Work estimated in excess of prescribed limits of cost.*—Whenever repairs or work other than customary voyage repairs are deemed necessary on said steel vessels of the Corporation, or whenever it is estimated the cost of voyage repairs on any steel vessel shall in the aggregate exceed \$10,000 in continental United States, or \$1,000 at any other port, the regulations as set forth in Section III will govern.

*Agents' responsibility when prescribed limits of cost are exceeded.*—When the agent estimates that the cost of work proposed, or is advised that the cost of work which has already been authorized by him will exceed or actually does exceed the prescribed limits, he will immediately notify the bureau for authorization or decision from the repair department as to the continuation of the work.

*Contractors' responsibility when prescribed limits of cost are exceeded.*—The contractor performing work will be held responsible for notifying the agent when the cost does exceed or when it is estimated by the contractor that the cost will exceed the prescribed limits. Failure of any contractor to comply with instructions contained in this paragraph will be sufficient cause for removal of such concern from the approved list of contractors.

*Agents' responsibility for completion of repairs.*—All negotiations for repairs which have been commenced by the agent will be handled by that agent with contractor to final completion of work, irrespective of final cost of same, and all orders or contracts in connection with such work will be given by the agent to contractor, it being the agent's responsibility to secure authorization in excess of prescribed limits through the bureau, which shall obtain such authorization from the accredited representative of the repair department. Requests for authorization of work in excess of prescribed limit will be accompanied by requisition setting forth such work in detail. The repair department reserves the right to eliminate or add such items as it may consider proper.

*Maintenance of vessel's classification.*—After formal acceptance by the agent of a steel vessel, upon checking of inventories and completion of surveys, when required, the agent will be held responsible for the fulfillment of all requirements of classification society with which each steel vessel is registered; also of Steamboat-Inspection Service.

*Managing agents' responsibility for dry docking.*—Every steel vessel shall be dry docked within a period not to exceed eight months between two dockings for routing inspection, cleaning, painting, and necessary repairs. The responsibility for this will rest with the agent, who in each case will first notify the bureau in order that representative of the bureau may be present. On dry docking, a complete inspection will be made of vessel's underwater parts.

*Handling of negotiations.*—All negotiations in connection with repairs to steel vessels operated under agency agreement M-03 will be conducted by the agent with the bureau, which will confer with and secure required authorizations from the accredited representatives of the repair department.

*Repairs to wood vessels.*—In no case will the agent undertake repairs of any nature to wood vessels.

#### **Ex-Enemy Vessels.**

The activities of the repair department were considerably extended when these vessels were added to the fleet in regular service.

Upon the return from the War Department of steamships which were used as troop carriers during the war period, it was necessary

to thoroughly recondition these vessels. This work included the removal of gun foundations, magazines, troop accommodations, temporary ventilating, fire, sanitary, and electric systems, also alterations in the structure of the ships to put the vessels in the same condition as when taken over by the War Department.

A number of ex-German cargo vessels, moreover, were on an average over 20 years old and required extensive repairs.

For the purpose of handling this work, a section of the repair department was organized in June, 1919, and established headquarters in New York City. As soon as the vessels were delivered to the Shipping Board an inspection was made and specifications prepared for reconditioning.

During the fall of 1919 it was necessary to employ the services of three naval architectural and marine engineering firms in the city of New York to assist the section in making surveys and preparing plans. It was obvious that these smooth-running organizations would be more able to obtain prompt results than would be possible if attempt were made to build up an enlarged organization within the Corporation. In all, these outside firms assisted this section in the surveys of 11 ships.

During the period of reconditioning various vessels were assigned to steamship companies to supervise the progress of the work, being paid a fee by the Shipping Board, and furnishing the services of the necessary inspectors in each case. These inspectors were employees of the steamship companies and kept this section informed as to the progress of reconditioning through the managing steamship company, making it possible to complete the work of reconditioning to the satisfaction of the operating company.

To date five passenger steamers have been reconditioned and placed in service under management and operation, and reconditioning is in progress at various yards of six passenger steamers, three cargo vessels, and three wrecking tugs. Plans and specifications for the conversion of two submarine chasers to dispatch boats are being prepared.

All requisitions for the work and all invoices, etc., against the above vessels are reviewed and approved before they are authorized or paid.

The situation in respect to each of the ex-enemy vessels is set forth below, and the physical details are described in Table XXVI.

*Steamship "Aeolus."*—This vessel, the former North German Lloyd steamship *Grosser Kurfurst*, was in service during the war as an Army transport and is reputed to have made more trans-Atlantic round trips than any other vessel. She was put out of commission by the Army September 22, 1919, and delivered to the Shipping Board.

From the date of her demobilization until October 10 she lay at anchor in the North River while the miscellaneous Army equipment was removed. On October 10 plans and specifications for reconversion were commenced, and on December 8 tenders were invited for reconditioning. Eight contractors submitted bids ranging from \$1,819,000 (130 days) to \$2,826,853 (155 days). On December 21 tender of the lowest bidder was accepted, the Baltimore Dry Docks & Shipbuilding Co., and on December 26 the vessel sailed for Baltimore, arriving January 2, 1920, when considerable time was lost in discharging ballast and bringing the vessel to the yards of the contractor. Actual reconstruction began on January 12, and the work is now about 65 per cent advanced.

On account of strikes and an extensive change in the plans, resulting from further surveys, a considerable increase of cost has resulted and an extension of time was necessary. The vessel is now on dry dock and will be completed the latter part of September, when she will be operated and managed by the Munson Steamship Line as a first, second, and third class passenger vessel for service to the east coast of South America.

The *Aeolus* will be an excellent example of reconditioning. The ship will have been converted from coal to oil burning and equipped with the most modern and desirable first-class cabins de luxe.

*Steamship "Agamemnon."*—Formerly the North German Lloyd steamship *Kaiser Wilhelm, 2d*, a 23-knot express steamer. This vessel was interned at Hoboken at the outbreak of the war and was in the Transport Service after the United States entered hostilities. She was put out of commission and turned over to the Shipping Board on November 22, 1919, and on the 24th plans and specifications for her reconditioning were commenced, the services of Messrs. Kindlund & Drake, naval architects, being engaged for the purpose of making a survey and preparing plans for the vessel in its present condition. On March 24, 1920, vessel was sent to the New York Navy Yard, where she now is undergoing engine and boiler repairs only, as the last amount of reconditioning has not yet been approved. It is expected that these repairs will be completed during the month of August, 1920, but the balance of the reconditioning to put this vessel in first-class trans-Atlantic service will take an additional period of from four to five months. Tentative plans for the work have been prepared, but do not include conversion from coal to oil burning equipment.

*Steamship "America."*—Formerly the Hamburg American Line steamship *America*, a 22,622 gross ton liner of 17½ knots speed. This vessel is still in the Army Transport Service.

*Steamship "Amphion."*—Formerly the steamship *Kolm*. This vessel was turned over to the Shipping Board by the Navy on the 27th of September, 1919, and it was decided that on account of the great amount of reconditioning work she will be turned over to the repair section for the execution of the necessary repairs to fit her for service carrying cargo only. Tenders for this work were received on October 25, and on November 1 the vessel proceeded to Providence to the yards of the Lord Construction Co., who were the lowest bidders. The necessity for a great deal of unforeseen work became apparent during the course of repairs, and it was not until the 14th of March, 1920, that the vessel left Providence and returned to New York, where she has since laid at anchor awaiting allocation.

*Steamship "Antigone."*—This vessel was formerly the North German Lloyd *Nackar*, and, like all these vessels, was put into the troop-carrying service during the war. She is still an Army transport.

*Steamship "Artemis."*—Formerly the Hamburg-American Line steamship *Bohemia*. This vessel was demobilized on October 18, and, like the *Amphion*,

turned over to the repair section to be fitted for cargo carrying only. On November 18 a contract for the work was awarded for repairs for cargo only. Additional repairs were subsequently made and the ship was allocated to the France & Canada Steamship Line for service as an animal carrier to Europe. The vessel has made several trans-Atlantic trips in the service.

*Steamship "Black Arrow."*—Formerly the steamship *Rhaetia*. This vessel was placed out of commission at Norfolk on the 10th of August, 1919, and proceeded to New York on the 15th, where various minor hull and machinery repairs and installation of passenger fittings were made, after which she was allocated to the American Line, and left on the 25th of September, carrying steerage passengers to the Black Sea. On May 7, 1920, she was allocated to the Ward Line, and on May 11 proceeded to Boston for reconditioning at the Boston Navy Yard, where she now is undergoing miscellaneous hull, engine, and boiler voyage repairs and slight alterations and reconditioning of passenger quarters. She is to be fitted for 93 first-class passengers and 570 steerage passengers, and will be completed about the middle of September, 1920.

*Steamship "Callao."*—Formerly the steamship *Sierra Cordova*. This ship was built in 1912 at the Vulcan Iron Works, and made but one-half of her maiden voyage to South America, where she interned in Peru at the outbreak of hostilities. She arrived in New York and was put out of commission by the Navy on the 5th of October, and on the 31st of October the services of Cox & Stevens, naval architects and marine engineers, were engaged in the preparation of plans and specifications for her reconditioning. On December 18 tenders were invited for this work, and on December 24 award was made to the United States Navy Yard, New York, lowest of eight bidders. The proposals ranged as follows: Navy Yard, New York, \$601,500 (60 working days) to \$1,200,000 (120 working days). The navy yard completed alterations on March 8, and on March 20 the vessel sailed under the operation and management of the Munson Steamship Line for her first voyage, with passengers to the east coast of South America. The reconditioning work did not include conversion to burning oil.

*Steamship "DeKalb."*—Formerly the North German Lloyd steamship *Prinz Eitel Frederick* interned in Newport News, where she was taken over by the Navy and later operated as a transport. On December 24 she was placed out of commission and turned over to the Shipping Board. On October 10 plans and specifications for her reconditioning were commenced. These plans were completed and approved on the 8th of December, on which date bids were invited for her reconditioning. On the 15th of December, before the bids were opened, the vessel was very badly damaged by fire while lying at anchor in the North River, necessitating the recalling of all tenders and the rewriting of specifications to cover the additional damage. New plans and specifications were completed on the 17th of January, and on the 23d bids were opened for her reconditioning as a first-class oil-burning passenger vessel; seven tenders were received, but on March 25 all bids were formally rejected. The vessel is now lying at the Army base in Brooklyn awaiting action.

*Steamship "Eten."*—Formerly the Cosmos Line steamship *Rhakotis*; demobilized at Newport News on August 19. The vessel proceeded to New York on September 9, and was allocated to the United States & Australia Line for service to South Africa. After minor repairs in New York she sailed on October 9, and is now en route to Cape Town on her third voyage.

*Steamship "Freedom."*—Formerly the North German Lloyd steamship *Wittekind*; demobilized September 23, 1919. This vessel was turned over to the repair section to convert for cargo carrying only. Bids for this work were re-

ceived on October 23, and award made to the Standard Shipbuilding Corporation on November 17. She was allocated to J. H. Winchester & Co., and is now in their service from Portland, Me., to Antwerp.

*Steamship "George Washington."*—Formerly the North German Lloyd steamship of the same name. This vessel will be identified as that which carried the President on his two trips to and from Europe. The *George Washington* was placed out of commission on the 29th of January, 1920, and plans and specifications were commenced on that date by Cox & Stevens, naval architects. On February 27 the vessel left for the Boston Navy Yard, where she arrived on March 1, on which date reconditioning was commenced. As authority was only given for repairing engines and boilers, no progress has been made on passenger or crew accommodations. June 30, 1920, has been fixed as the date of completion, but extensive alterations to passenger and crew accommodations have yet to be done.

*Steamship "Huron."*—This vessel was the former North German Lloyd steamship *Frederick der Grosse*, was interned in this country at the outbreak of the war, and was subsequently placed in the Army Transport Service. The *Huron* was placed out of commission by the Navy on the 3d of September, and immediately plans and specifications were prepared for her reconditioning. On October 11 tenders were invited to do this work, and four bids received, ranging from that of the Morse Dry Dock & Repair Co., for \$1,263,839 (135 days) to \$1,705,000 (139 days). Award was made to the low bidder and work was commenced on the 17th of November and completed on the date the vessel sailed on her first voyage to South America, May 15, 1920. This reconditioning not only included conversion from coal to oil fuel; first, second, and third class passenger accommodations; but also called for the installation of the gyroscopic stabilizer, calculated to practically eliminate all rolling. This installation has not yet been made because the stabilizer is not complete, but will be installed at some future date. The *Huron* is managed and operated by the Munson Steamship Line, and in June, 1920, sailed with passengers and cargo for South America.

*Steamship "Leviathan."*—Formerly the Hamburg American Line steamship *Vaterland*. This is the largest ship in existence, and after services as a transport was put out of commission on October 29, 1919. She was allocated to the American Line on November 15, and the American Line, acting as agents for the Shipping Board, prepared plans and specifications for her reconditioning. These plans and specifications were completed on the 9th of April, on which date tenders were invited; two bids were received on the 15th of May, but were rejected, and the ship was later offered for sale in her present condition.

*Steamship "Madawaska."*—Formerly the Hamburg American Line steamship *Koenig Wilhelm, 2d*. The *Madawaska* is still in the Army Transportation Service.

*Steamship "Martha Washington."*—Formerly the Unione Austr. di Navig. steamer of the same name. This vessel remained in the Transport Service until the 5th of February, 1920, when she was placed out of commission and turned over to the Shipping Board. On the 6th of February she was sent to the New York Navy Yard for reconditioning on a time and material basis. This work was completed on the 15th of April, and the vessel sailed on the 28th of April under the management of the Munson Steamship Line for the east coast of South America, for first and second class passengers and general cargo.

*Steamship "Mercury."*—Formerly the North German Lloyd steamship *Barbarossa* and still in the Army Transport Service.

*Steamship "Mount Vernon."*—Formerly the North German Lloyd steamship *Kron Prinzessin Cecilie*, a 24-knot express steamer also in the Army Transport Service at this time.

*Steamship "Nansemond."*—Formerly the Hamburg American steamship *Pennsylvania*. This vessel was placed out of commission on September 16, 1919, and on September 25 was sent to the National Dry Dock & Repair Co., to be fitted for cargo-carrying purposes only. Considerable strike trouble delayed the completion, and it was not until the 19th of December that the work was finished. In the meantime the services of Messrs. Cox & Stevens, naval architects, had been retained for the preparation of plans and specifications for future reconversion for cabin passengers and steerage. This vessel was at first allocated to the American Line, but subsequently chartered on a bare-boat basis to the Army Transport Service now operating between New York and Antwerp.

*Steamship "New Rochelle," ex-"Pochatan."*—Formerly the Hamburg American Line steamship *Hamburg*. This vessel was in the Army Transport Service until the 31st of March, 1920, when she was demobilized and turned over to the Shipping Board. On the 29th of April she was chartered on a bare-boat basis to the International Bureau of Supplies, but Messrs. Kindlund & Drake, naval architects, have been commissioned to prepare plans and specifications for her reconditioning and have placed the vessel at the Morgan Engineering Works, Jersey City, where this work is being done.

*Steamship "Otsego."*—Formerly steamship *Prince Eitel Frederick*; demobilized on September 20, 1919. On the 5th of November the work of preparing plans and specifications was awarded to J. W. Millard & Bro., naval architects and marine engineers. These plans were completed and approved on February 10, and tenders for reconditioning invited. Seven tenders were received ranging from \$970,000 (110 days) to \$1,477,576 (130 days). These bids were rejected March 25, 1920, and the vessel proceeded in tow to the Portsmouth Navy Yard on May 17, 1920, to be reconditioned for cargo-carrying purposes only. The work should be completed in September, 1920.

*Steamship "Philippines."*—Formerly steamship *Bulgaria*. This vessel was demobilized at Newport News 24th of October, 1919, and specifications prepared by the Baltimore office for reconditioning for cargo only. Bids were received on the 30th of November, and on the 4th of December work was awarded to the Baltimore Dry Dock & Shipbuilding Co. These repairs were completed on the 10th of January, 1920, and the vessel was subsequently allocated to the France & Canada Steamship Co. to load for Rotterdam. She has since returned and sailed from Baltimore on June 11 for Gothenburg via Newport News.

*Steamship "Pocahontas."*—Formerly the North German Lloyd steamship *Princess Irene*. This vessel is still in the Army Transport Service.

*Steamship "Porto Rico," ex-"Moccasin."*—Formerly the Hamburg-American Line steamship *Prinz Joachim*. This vessel was placed out of commission and turned over to the Shipping Board by the Navy Department on the 9th of June, 1919, and preparation of plans and specifications for reconditioning and converting from coal to oil fuel were commenced. On August 15 bids were received ranging from \$390,000 (65 days) to \$732,000 (120 days). The award was made to Messrs. Tietjen & Lang, the low bidders, and on December 28 the vessel was finally completed and sailed under the management and operation of the Munson Steamship Line with first-class passengers and general cargo for the east coast of South America. After reconditioning at the New York Navy Yard, necessary by an accident in New York Harbor, and certain rearrangements for the Porto Rico trade, the vessel was assigned to the Porto Rico Steamship Co. for management and operation.



*Steamship "President Grant."*—Formerly Hamburg-American Line steamer of the same name. This vessel is still in the Army Transport Service.

*Steamship "Princess Matoika."*—This ship was formerly the North German Lloyd steamship *Princess Alice*, and is still in the Army Transport Service.

*Steamship "Susquehanna."*—Formerly the North German Lloyd steamship *Rhein*. This vessel was demobilized on the 16th of September and reconditioned for cargo-carrying purposes only by the Morse Dry Dock & Repair Co. On the 1st of November she was allocated for management and operation to Phelps Bros. Steamship Co., at whose request plans and specifications were prepared to fit her out for the carrying of steerage passengers. Five tenders were received for this work, ranging from \$246,591 (21 days) to \$309,000 (65 days). Award was made to the Morse Dry Dock & Repair Co., the low bidders, and work was completed on the 10th of January, when the vessel sailed on her first trip to Greece. On her second trip she ran ashore off the Dalmatian coast, but continued her voyage and returned to New York on the 2d of June. She is now on dry dock at the New York Navy Yard, where she is having the bottom damage made good and minor voyage repairs performed.

*Steamship "Swanee."*—Formerly the steamship *Mark*. This ship was demobilized on the 5th of October, and a contract was awarded on the 31st of October to the Robins Dry Dock & Repair Co. to convert the ship to a cargo carrier only. The work was completed in January, 1920, and in February the ship was sold to the Polish-American Navigation Co.

*Steamship "Von Steuben."*—Formerly North German Lloyd steamship *Kron Prinz Wilhelm*. This vessel was interned at Newport News during the war and was in the Transport Service from the time this country entered the war until November 25, when she was placed out of commission by the Navy. Preparation of plans and specifications was then begun, with the assistance of Messrs. Cox & Stevens, naval architects, who prepared various drawings and finished their survey on the 7th of February. Plans for the reconditioning have been completed.

#### **Remeasurement of Vessels.**

During the hostilities shipbuilding was a war industry of vital importance, and the delivery of ships as rapidly as possible the principal aim of the Corporation. After the signing of the armistice advantage was taken of the opportunity to analyze the fleet in service and under construction and to consider from a commercial standpoint the details which affect the utility of ships in the trade routes of the world.

As tonnage ratings, both gross and net, are the basis of charges for wharfage, dry docking, port and harbor dues, canal tolls, and other operating expenses, an examination of the principles which had governed the assignment of tonnages was at once undertaken.

There was practically no difference between the rules for measurement of the United States vessels and those for British vessels, except in cases where fuel oil is carried in the inner bottom. In all other details the rules and results are practically similar and equal. It had been the custom to include in our measurements for volume a portion of the inner bottom of a ship when used for carrying oil, stores, or feed water. The extensive use of the inner bottom of the ship for the above purpose was a later development of the war in

connection with vessels of the United States, and on August 4, 1919, the Bureau of Navigation issued instructions to its representatives to exclude the entire inner bottom space from the under-deck tonnage measurement of our ships.

This decision is in accordance with the fundamental law of the United States and follows the customs of other countries. Collectors of customs were therefore authorized to remeasure, on application, ships with double bottoms, to make resulting change in tonnage, and to issue new registers accordingly.

The Corporation is having new tonnage assigned by collectors of customs to ships carrying feed or drinking water, fuel, or cargo oil on the double bottom, which had previously been measured under the former ruling, and all district representatives of the Division of Operations are under instructions to request that the survey be made by the collector of customs whenever vessels of this description are in port.

Consideration was also given to the addition of light and air spaces to the volume of machinery space and to the installation of tonnage openings in the forecastle, bridge, and poop by means of which reductions in the tonnage assigned have been effected. These changes have been approved by the Bureau of Navigation and by the classification societies, and are being made whenever possible while repair work is in progress.

The activities of this branch of the repair department were begun during the fiscal year, and remeasurement of 283 ships had been completed by June 30, 1920, resulting in a reduction of 48,536 gross tons and 85,451 net tons from the assigned tonnages.

The saving in operating charges involved in this reduction in tonnage will be understood by reference to its effect upon shipping in service. The net tonnage of the Hog Island A ship is 3,100 tons, approximately, and the reduction is equivalent to the use of 27 Hog Island A ships exempt from the dues mentioned above.

Based on the average annual charges per net ton in service, the remeasurement of ships has effected a saving in operating expenses of approximately \$835,000 for the fiscal year, not including the saving in dry-docking costs or Panama Canal dues.

This work is still in progress and will be continued until the entire fleet has been remeasured and new tonnages assigned whenever possible. As a result of these activities, our ships have been placed on equality with the vessels of other nations in respect to the fixed charges in ports and canals to which all shipping is subject.

#### **Expenditures for Repairs.**

Under the original form of managing agreement, voyage repairs were authorized by the managers of the ships and charged in the voyage accounts.

The repair department assumed control of expenditures in all districts on May 1, 1919, and decentralized the system to prevent delay in the execution of the work. Under this form of organization, disbursements were at the following rates, the amounts being low for the first two months pending the establishment of the system:

*Disbursement for repairs in ports of the United States, exclusive of cost of reconditioning or repairing ex-enemy vessels.*

1919.		1920.	
May .....	\$605, 343. 91	January .....	\$4, 795, 355. 58
June .....	1, 448, 515. 60	February .....	5, 424, 068. 45
July .....	2, 910, 001. 74	March .....	7, 085, 185. 13
August .....	2, 509, 938. 74	April .....	6, 693, 372. 01
September .....	2, 863, 351. 59	May .....	6, 825, 213. 68
October .....	6, 243, 581. 89	June .....	5, 750, 000. 80
November .....	7, 256, 812. 07		
December .....	6, 768, 924. 69	Total.....	67, 179, 665. 88

The sum of \$5,413,789.40 has been expended to June 30, 1920, for repairs to the ex-enemy vessels and reconditioning charges after their delivery to the United States Shipping Board.

These expenditures were distributed among the districts as follows:

Boston .....	\$4, 937, 152. 43	New Orleans.....	\$4, 034, 254. 15
New York .....	40, 591, 162. 99	San Francisco.....	1, 727, 205. 31
Philadelphia .....	2, 511, 177. 49	Cleveland .....	341, 507. 92
Baltimore .....	5, 212, 353. 48		
Norfolk .....	7, 824, 852. 11	Total.....	67, 179, 665. 88

The total maintenance costs above include expense incident to installation of additional equipment on vessels, alterations, betterments, etc., and are not confined to actual repair items, renewals, replacements, etc., due to defective installations or wear and tear.

In addition to the expenditures at ports in the United States, repairs to ships at foreign ports have been made, but the work done under those conditions covers generally the usual voyage repairs or emergency items, and the amounts involved are not large.

While the maintenance costs represent a large item considered apart from the fleet, the expenditures are not excessive when analyzed in relation to the number of ships in service; they are offset, moreover, by operating revenues.

#### **Organization.**

By January 1, 1919, the organization of the Construction and Repair Department was established, with headquarters at Washington. The districts were in charge of a chief inspector reporting to the manager.

On May 1, 1919, in line with the general policy of the Division of Operations toward decentralization, the chief inspectors were placed under the immediate direction of the district representative of the

Division of Operations, and all negotiations with the home office were conducted over the signature of the district representatives, who were held responsible for the proper conduct of the activities of the department in their respective districts.

In view of the fact that practically all activities in connection with reconditioning of the ex-German vessels and also approximately 60 per cent of repair activities were centered at New York, it was decided on February 1, 1920, that the home office of the construction and repair department should be situated in that city. Arrangements were made accordingly, and the office was moved to the sixth floor at 45 Broadway, which building is owned by the United States Shipping Board.

The organization of the repair department at the close of the fiscal year included the following in the various offices:

	Employees.	Total annual salaries.
New York.....	154	\$417,170
Philadelphia.....	20	65,120
San Francisco.....	9	24,840
Portland.....	3	10,260
Seattle.....	6	19,700
New Orleans.....	25	71,820
Cleveland.....	14	47,220
Norfolk.....	39	108,578
Baltimore.....	15	43,398
Boston.....	24	68,108
Total.....	309	873,208

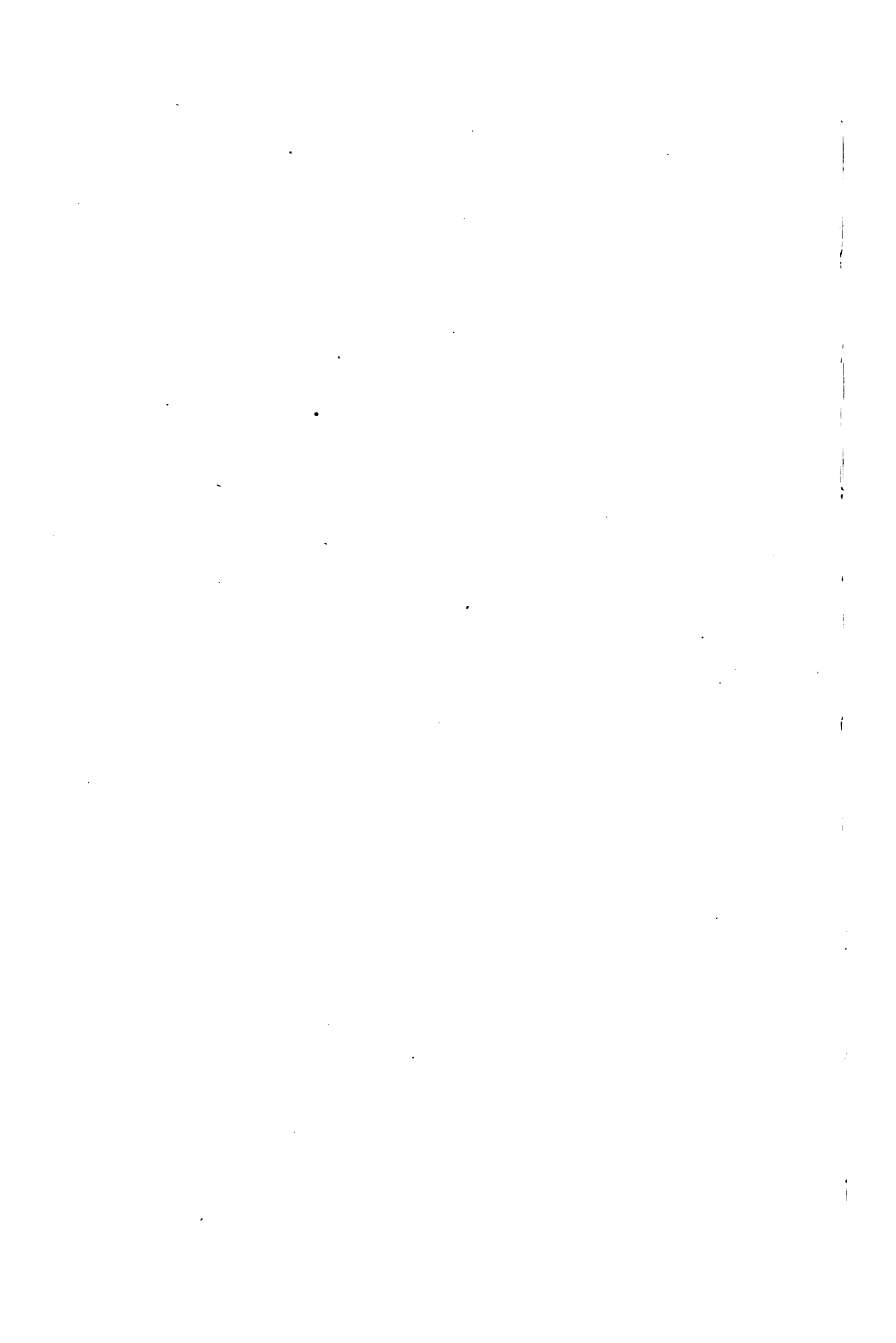
---

---

**UNITED STATES SHIPPING BOARD  
EMERGENCY FLEET CORPORATION**

—  
**Division of Operations**  
—

**PART III**



### III. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF OPERATIONS.

The fiscal year with which this report deals represents an important period in the history of the merchant marine of the United States from the standpoint of the operator. During the war and for some time after the signing of the armistice all vessels were used for transportation of troops or for European food relief. At the beginning of the fiscal year just ended the transition to a commercial basis had been effected, and the development of trade and passenger routes and establishment of foreign agencies followed. The fuel-oil situation, moreover, presented problems difficult of solution.

Since the third annual report the resignations of Directors John H. Rosseter, on October 31, 1919, and John E. Cushing, on May 31, 1920, have occurred, followed by the appointment of Paul Foley as director of operations.

On April 15, 1919, the Division of Operations was charged with the control of 1,207 vessels of 6,556,920 tons dead-weight. On June 30, 1920, additional deliveries of new tonnage and releases by the war service and European food relief have increased these figures to 1,502 vessels of 9,367,551 tons dead-weight.

On June 30, 1920, over 1,000 vessels were engaged in foreign trade to all principal ports of the world. The analysis of this traffic for the latter half of the fiscal year indicates results which are very satisfactory in comparison with the relative utility in commerce of ships sailing under other flags.

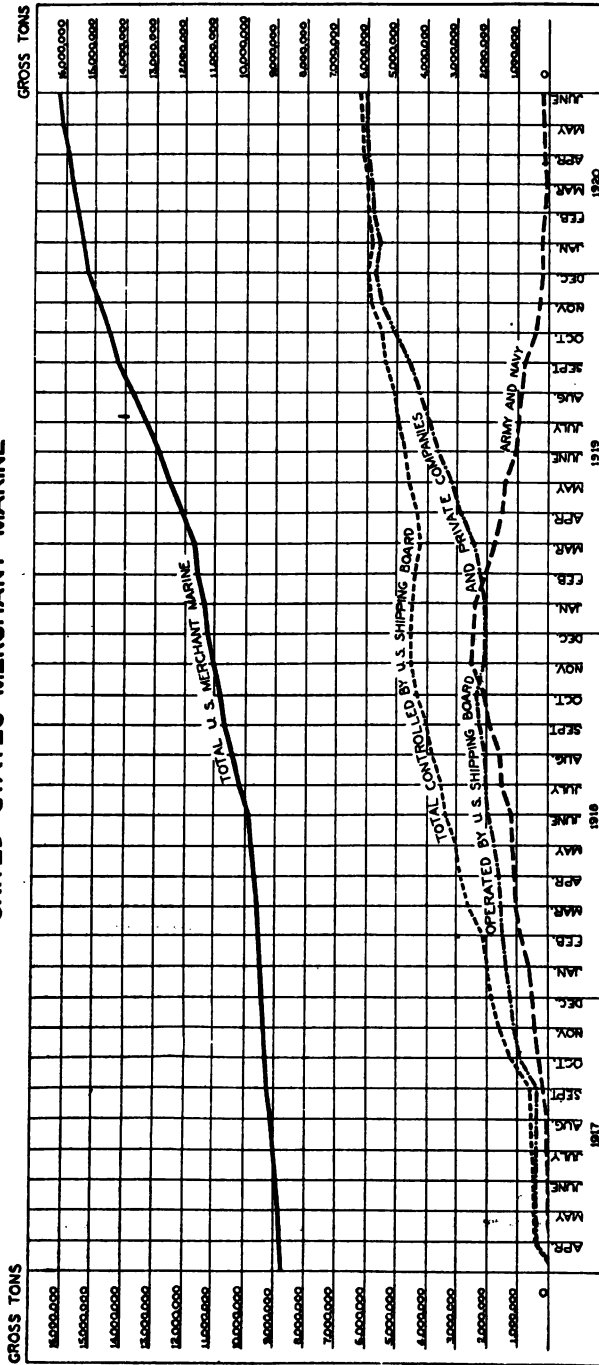
#### UNITED STATES SHIPPING IN FOREIGN TRADE.

A survey of cargo vessels entering and clearing in the foreign trade at United States customs districts, covering the first six months of the calendar year 1920, shows some very interesting features on the relation between the number of domestic and foreign bottoms engaged in the export and import trade with the United States and the dead-weight and cargo tonnage involved.

The volume of carrying trade for the period mentioned, both exports and imports, is shown in the following schedule:

	Vessels.	Dead-weight tons.	Cargo tons.
American ships.....	9,550	51,534,620	22,724,217
Other ships.....	6,008	35,397,080	15,273,967
Total.....	15,558	86,931,700	37,998,184

UNITED STATES MERCHANT MARINE





The participation of American bottoms in the total carrying trade, as shown in the following analysis, indicates a well-balanced use of our ships compared with the utility of foreign vessels in service to this country, with a slight advantage to our ships in the cargo per dead-weight ton:

	American ships.	Foreign ships.
Number of ships engaged.....	<i>Per cent.</i> 61.4	<i>Per cent.</i> 38.6
Dead-weight tonnage.....	58.3	40.7
Cargo tonnage carried.....	60.8	39.2
Ratio of cargo tonnage to deadweight tonnage.....	44.1	41.5

An examination of the carrying trade in exports and imports, separately, shows wide variations from the averages for the total trade.

EXPORT TRADE.

	Vessels.	Dead-weight tons.	Cargo tons.
American ships.....	4,995	25,328,060	11,591,446
Other ships.....	3,119	18,426,437	11,131,719
Total.....	8,114	43,754,497	22,723,165

	American ships.	Foreign ships.
Number of ships engaged.....	<i>Per cent.</i> 61.6	<i>Per cent.</i> 38.4
Dead-weight tonnage.....	57.9	42.1
Cargo tonnage carried.....	61.0	49.0
Average cargo per ship.....	<i>Tons.</i> 2,320	<i>Tons.</i> 3,248
Cargo tons per dead-weight tonnage of ship.....	0.46	0.6

IMPORT TRADE.

	Vessels.	Dead-weight tons.	Cargo tons.
American ships.....	4,555	26,206,570	11,132,711
Other ships.....	2,889	16,771,643	3,542,278
Total.....	7,444	43,177,213	14,675,019

	American ships.	Foreign ships.
Number of ships engaged.....	<i>Per cent.</i> 61.2	<i>Per cent.</i> 38.8
Dead-weight tonnage.....	60.7	39.3
Cargo tonnage carried.....	75.9	24.1
Average cargo per ship.....	<i>Tons.</i> 2,444	<i>Tons.</i> 1,226
Cargo tons per dead-weight tonnage of ship.....	0.42	0.20

This analysis indicates that while many of the American vessels are carrying return cargoes to the United States ports, the foreign vessels are to a large extent entering in ballast and clearing with more cargo in proportion to the number and tonnage of vessels employed.

Complete details showing these features of the shipping industry are contained in Table I.

**TRAFFIC DEPARTMENT.**

**Trades, Rates, and Claims Section.**

At the close of the year the Shipping Board exercised control over the following fleet:

*Vessels owned and controlled by the United States Shipping Board as of June 30, 1920.*

Class.	Total.		Cargo.		Transports.		Tankers.		Refrigerators.		Cargo and passenger.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Contract steel vessels.....	978	6,585,473	920	6,032,456	1	8,822	49	476,088	8	68,107	.....	.....
Requisitioned steel vessels....	201	1,329,410	178	1,156,160	2	17,799	14	110,938	7	44,513	.....	.....
Wood and composite vessels...	267	986,533	267	983,533	.....	.....	.....	.....	.....	.....	.....	.....
Concrete vessels..	4	13,500	4	13,500	.....	.....	.....	.....	.....	.....	.....	.....
Purchased vessels	24	157,921	24	157,921	.....	.....	.....	.....	.....	.....	.....	.....
Seized German and Austrian vessels.....	28	259,014	1	600	.....	.....	.....	.....	.....	.....	25	258,414
Chartered from Peru.....	2	18,700	.....	.....	.....	.....	.....	.....	.....	.....	2	18,700
Total.....	1,602	9,347,551	1,394	8,344,170	3	26,621	63	587,126	15	112,620	27	277,114

On June 30, 1920, 1,023 of these vessels were in foreign service from all of the principal ports of the United States in the leading trade routes, as shown on Table II.

During the past year the trades, rates, and claims section continued the study of the world's exports and imports, the channels through which these flow, as well as the number of ships and the types most suitable for various trades.

As a result of this investigation, the United States Shipping Board at the present time has a grand total of 209 general-cargo berths, of which 202 are between United States and foreign ports and between United States ports; 7 between foreign ports. In connection with this number of berths, 229 services are maintained.

The lines extend to every principal region of the world, the cargo berths being assigned as follows:

North Atlantic.....	100
South Atlantic.....	27
Gulf.....	54
Pacific coast.....	21
Foreign ports.....	7
Total.....	209

The seven foreign services are those from La Plata to Europe, refrigerator; West Indies and Mexico to Continental Europe, general; Manila and Shanghai to Europe, general; and the West Coast of Africa to United Kingdom, general.

In addition to the foregoing are the three newly established "feeders," in which a fleet of nine vessels of an average of 3,500 dead-weight tons each cover the territory from Tientsin to Calcutta. The boats in these three "feeder" services carry the cargoes between the smaller ports in the range and the principal transshipment centers at which the larger freighters call at regular intervals.

The general cargo berths which have been established follow to a large extent the routes which were active before the war. As a result of the war these routes were left without requisite shipping facilities and offered opportunities for the employment of our tonnage. The policy of utilizing these trade routes has been applied in a broad and liberal manner without discrimination or prejudice.

The work of this section was not confined alone to the establishing of liner services. The ships of the Board carried as tramp cargoes products from every principal seaport of the United States to all ports of the world, in many instances where the American flag had seldom, if ever, before been flown by a merchantman.

The principal changes in the employment of Shipping Board tonnage during the fiscal year are indicated in the following schedule, based upon the percentage of the entire fleet under control of the Board:

	June 30, 1919.	June 30, 1920.
	<i>Per cent.</i>	<i>Per cent.</i>
Army and Navy.....	19.7	1.48
Trans-Atlantic.....	17.7	0.00
Northern Europe.....	22.3	39.63
Southern Europe.....	4.8	10.43
Africa.....	1.0	3.00
Trans-Pacific.....	7.9	16.21
South America.....	11.7	10.74
West Indies.....	6.6	8.85
Foreign ports to foreign ports.....		2.95
Domestic.....	8.3	6.71
Total.....	100.0	100.00

The following tonnage report for June, 1920, tabulates the employment of all the vessels in operation under the control of the Shipping Board; the services or trades in which they are engaged; the tonnage in every trade; and the relation in percentage which the amount of tonnage in every service or trade bears to the total amount in active operation:

Trade.	Number of ships.	Dead-weight tonnage.	Per cent of total.
<b>Trans-Atlantic:</b>			
Army.....	12	123,687	1.48
Navy.....			
<b>Northern Europe—</b>			
Baltic Sea.....	69	423,490	5.05
United Kingdom.....	163	1,086,517	12.97
North Sea.....	131	976,050	11.65
French Atlantic.....	114	679,981	8.12
Northern European ports.....	31	154,007	1.84
<b>Total.....</b>	<b>508</b>	<b>3,319,995</b>	<b>39.63</b>
<b>Southern Europe—</b>			
Portugal-Spain.....	28	169,984	2.03
North Mediterranean.....	69	1,504,372	6.02
Adriatic Sea.....	5	34,317	.41
Aegean Sea.....	20	135,884	1.62
Black Sea.....	4	29,026	.35
<b>Total.....</b>	<b>126</b>	<b>873,583</b>	<b>10.43</b>
<b>Africa.....</b>	<b>33</b>	<b>255,316</b>	<b>3.04</b>
<b>Trans-Pacific:</b>			
Indian Ocean, Straits Settlements, Dutch East Indies.....	9	79,293	.94
Australia, New Zealand, New Guinea.....	11	92,003	1.10
<b>Hawaii.....</b>	<b>13</b>	<b>81,167</b>	<b>.97</b>
Siberia.....	1	9,498	1.11
Orient.....	121	1,044,217	12.47
Philippines.....	8	51,591	.62
<b>Total.....</b>	<b>163</b>	<b>1,357,769</b>	<b>15.17</b>
<b>South America:</b>			
Brazil.....	35	232,671	2.78
La Plata.....	64	448,192	5.35
West Coast.....	39	218,446	2.61
<b>Total.....</b>	<b>138</b>	<b>899,309</b>	<b>10.74</b>
<b>West Indies, Carribbean.....</b>	<b>180</b>	<b>738,116</b>	<b>8.81</b>
<b>Foreign ports to foreign ports.....</b>	<b>38</b>	<b>247,297</b>	<b>2.95</b>
<b>Domestic:</b>			
Coastwise.....	48	196,605	2.35
Intercoastal.....	27	229,961	2.74
New England coal.....	33	135,465	1.62
<b>Total.....</b>	<b>108</b>	<b>562,031</b>	<b>6.71</b>
<b>Grand total.....</b>	<b>1,306</b>	<b>8,377,103</b>	<b>100.00</b>

<sup>1</sup> Includes 1 sailer, 2,847 dead-weight tons.

<sup>2</sup> Includes 1 sailer, 3,500 dead-weight tons.

<sup>3</sup> Includes 1 sailer, 2,214 dead-weight tons.

<sup>4</sup> Includes 1 sailer, 3,500 dead weight tons.

<sup>5</sup> Does not include 64 steamers chartered to independent companies; 226 unallocated and United States Recruiting Service.

Details showing change in the employment of the fleet are contained in Table III.

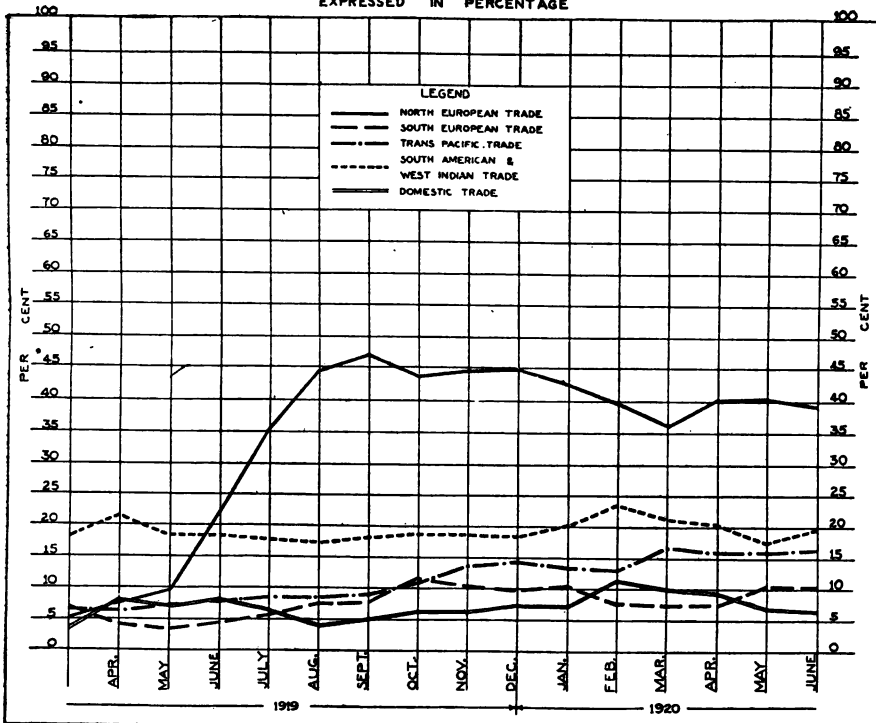
**Lines to Central and South America.**

Forty-one direct service lines have been established to South and Central America from nine ports on the Atlantic coast, four on the Gulf, and two on the Pacific coast, as follows:

To—	Number of lines.	Number of ships.	Dead-weight tonnage.
Buenos Aires.....	10	71	504,562
Montevideo.....	3	4	29,037
Para.....	3	4	19,484
Pernambuco.....	3	3	14,775
Rio Janeiro.....	5	13	88,507
Santos.....	1	2	10,150
Antofagasta.....	7	23	127,315
Callao.....	2	2	8,340
Iquique.....	1	4	21,451
Valparaiso.....	2	2	12,330
Cartagena.....	2	5	19,140
Colon.....	1	1	4,050
Puerto Barrios.....	1	1	4,050
<b>Total.....</b>	<b>41</b>	<b>135</b>	<b>863,191</b>

These lines are shown in detail on Table IV.

**PRINCIPAL EMPLOYMENT OF U.S. SHIPPING BOARD TONNAGE**  
 (EXCLUSIVE OF SHIPPING IN SERVICE OF WAR AND NAVY DEPARTMENTS AND IN EUROPEAN FOOD RELIEF)  
 EXPRESSED IN PERCENTAGE



**Vessels Operating Between Foreign Ports.**

Service between foreign ports is maintained by 78 ships of 461,695 dead-weight tons capacity, of which number 21 are wooden vessels, as shown in Table V.

**CARGO AND PASSENGER SERVICES.**

In passing from the review of the established general cargo berths to that of the combination freight and passenger, it is observed that the Board at the present time has two such services, as follows:

New York, East Coast of South America : Three vessels of a total of 25,680 dead-weight tons.

New York, South and East Africa : One vessel of 8,500 dead-weight tons.

The remaining freight and passenger vessels are at the present time undergoing reconditioning preparatory to their being placed in regular runs, or will be reconditioned for service when delivered by the War Department. A statement covering the present location and service of these ships is included in the report of the repair department, Section II. In addition, 27 others are in the process of construction, and the following services have been arranged for by assignment of this new tonnage subject to slight modifications as to itinerary:

San Francisco, Honolulu, Yokohama, Kobe, Shanghai, Manila, Hongkong, Seattle, Yokohama, Vladivostok, Dalny, Shanghai, Kobe.

New York, Los Angeles, San Francisco, Honolulu.

All of these vessels, with the exception of possibly six, will be delivered and in service before June 30, 1921. A general description of these ships will be found in the second section of this report and details of their construction in Table XVII.

Additional service may be expected from the assignment of the vessels on the San Francisco-Orient run in consideration of the Shipping Board's assignment. This Corporation, the Pacific Mail Steamship Co., is now partly covering this service with their own vessels of lesser speed which will be used by them to strengthen other Pacific services not requiring vessels of a more modern type.

The Board has been instrumental in the establishment of the following services by the chartering of its ex-German passenger liners on the following runs:

New York, Queenstown, Cherbourg, Bremen; returning via Cherbourg, Southampton.

New York, Dover, Boulogne, Danzig.

Boston, Queenstown, Cherbourg, Bremen; returning via Southampton, Cherbourg.

New York, Mediterranean ports.

## RATES.

The rates division continued to function, as outlined in the third annual report, until March 1, 1920. Prior to this date the division had the following tariffs:

North Atlantic to United Kingdom and Continent.  
 South Atlantic to United Kingdom and Continent.  
 Gulf to United Kingdom and Continent.  
 Atlantic and Gulf to South America.  
 North Atlantic and Gulf to Orient.  
 Pacific coast to Orient.  
 North Atlantic to New Zealand and Australia.  
 North Atlantic to India.  
 North Atlantic to Africa, Turkey, Red Sea ports.  
 Between Atlantic and Pacific ports.  
 Cotton: Atlantic and Gulf to United Kingdom and Continent.  
 Lumber: North Atlantic, Gulf, and Pacific to United Kingdom and Continent.  
 Coal: North Atlantic to European ports, Atlantic and Gulf to South America.  
 Coal: Pacific to Far East.  
 Nitrate: Chilean ports to North and South Atlantic.

On March 1, 1920, the managing agency agreement No. 3 was adopted, the general terms of which provide for the operation of Shipping Board vessels under a profit-sharing plan, which changed the method of rate making. Under this new arrangement, rates for vessels on general cargo services are made by conferences of Shipping Board managing agents. The conferences were organized under the supervision of the traffic department of the Division of Operations.

On full and bulk cargoes under this plan managing agents are given freedom of action in making rates subject to the prevailing market quotations.

On the formation of the general cargo conferences the rates division ceased to issue tariffs.

Four such general conferences have been established, namely, North Atlantic, with headquarters at New York; South Atlantic, with headquarters at Savannah; Gulf, with headquarters at New Orleans; Pacific coast, with headquarters at San Francisco. These general conferences have subcommittees which cover the other ports within their respective districts on general cargo services to practically all parts of the world.

As a result of these activities complete stabilization of rates in some trades and a large measure of stabilization in practically all the trades has followed.

The formation of the conferences after March 1, 1920, changed the character of the work of the rate division. Although being relieved of keeping in actual touch with the local conditions which was neces-

sary in order to quote on all kinds of cargoes and in varying quantities, the division has been called upon to perform duties of a different nature and of greatly added importance. The rules of the conferences require that any action on their part must be by unanimous vote; failing, the questions in hand are referred to the Board for decision. Further, before making any drastic rate changes the conferences must also submit their recommendations for approval. A successful functioning of the conferences as a whole requires a relationship in rates and practices among the different districts, which is brought about by suggestions or instructions from the rates division. Criticisms by the public of rates or practices when they are made are investigated and handled by this division with the assistance of the conferences, when necessary.

#### CLAIMS.

During the reorganization in January, 1920, the claims division was made a separate unit of the traffic department. It forms one side of the triangle in the trades, rates, and claims section.

Several important changes have occurred since the last report. First was the granting of authority to the American Steamship Owners' Mutual Protection and Indemnity Association to supervise, investigate, and settle all cargo claims which are covered by insurance (such as loss and damage claims, etc.). Formerly this association investigated those claims which were in excess of \$500 on single voyages of Shipping Board steamers in the club. All other claims for consequential losses which are not covered by insurance are thoroughly investigated and settled directly by the claims division. This applies on amounts up to and including \$5,000. Claims in excess of \$5,000, after investigation by this division, are referred to the Board for final approval.

When claims are presented to this division, there is immediately instituted a very thorough and exhaustive investigation through all available sources, with a settlement as expeditiously as possible. The result of this work is that complete equity and justice is done the shipper, and the interests of the Board are fully protected.

#### ALLOCATION AND ASSIGNMENT SECTION.

Prior to February, 1920, the work of the allocation and assignment section was performed by two departments, namely, the allocation department and the assignment department.

The allocation department particularly concerned itself with the maintenance and protection of general liner berths, through the allocation committee, composed of representatives of the trades, con-



tract, assignment, and coal export bureaus, and of the personnel and the construction and repair departments.

Information was collected and developed which might affect contemplated allocation relative to port and trade conditions. Finally, these allocations were announced for execution to the various assistant directors and district agents.

The assignment department, functioning as a separate entity, assigned for management and operation the vessels declared by the allocation department to be available. Assignments to managers and operators were made with regard to their experience, foreign connections, financial responsibility, nationality, efficiency, and desirability as operators.

In line with the policy at this time, encouragement was afforded newly organized steamship companies measuring up to the requirements, and which contemplated measures of permanency.

In these cases the Shipping Board has assisted in improving both the organization and services maintained. In recognizing the new operators, opportunity was offered them to secure the material assistance of the Government in establishing the business. The appointments of marine staff and foreign and domestic agents were supervised, and accordingly the operators have been enabled in time to found a permanent, efficient, and profitable business.

In February, 1920, the departments were combined and their functions coordinated. At that time preference in assigning a steamer was afforded those having less than 25,000 dead-weight tons under their operation, as well as to purchasers of Shipping Board vessels and owners of American documented vessels. More recently, upon the passage of the merchant marine act of 1920, preference is being extended, in the matter of assignments, and in some cases, where advisable, to recognition afforded those companies who are receiving the support, financial and otherwise, of the communities primarily interested in the inauguration and maintenance of such services as the Board has determined should be established. In accordance with the interpretation in the merchant marine act of 1920, the allocation and assignment section is scrutinizing the nationality of the personnel and of the company itself, with a view to eliminating those who do not conform to its requirements.

The allocation and assignment section has consistently endeavored to replace steamers sold with vessels of similar size and type for general cargo services. This section has also cooperated closely with the operating department in tying up, indefinitely, all wooden steamers which require excessive repairs.

Recommendations for assignments and reassignments prepared by the allocation and assignment section having been passed upon by

the manager of the traffic department and manager of the operating department, as well as the Director of Operations, are submitted to the Shipping Board for formal approval. Upon securing this approval the details of effecting assignments are carried out by this section.

Upon the completion of our European food relief program such allocated tonnage was released to various berth services—in many cases establishing new trade routes in which the American flag had not been flown for over 60 years. A considerable portion of the remainder of our tonnage was assigned to managing agents for bulk-cargo trades.

At the time vessels were requisitioned from their owners by the Shipping Board, the traffic department endeavored to assign these vessels to their owners for operations, when the experience in the particular trade in question and American character of their organization so warranted. When requisitioned vessels were redelivered to their owners, assignment of Shipping Board tonnage for operation and management was made when requested if operators offered attractive employment. In few cases owners having vessels returned did not ask for assignment of Shipping Board tonnage.

No difficulty has been experienced in obtaining operators of all Shipping Board tonnage available for service and none has remained idle on this account.

Assignments at the close of the fiscal year are shown in Table VI.

Much study has been given to the establishment of the liner services. Assignment of steamers of suitable size, type, etc., to maintain these services is, of course, the principal obligation of this department. Assignments of this nature are most desirable from both our standpoint and that of the operator, inasmuch as vessels suitable for a particular trade can obviously be operated in that trade more profitably than a type of steamer unsuited to the trade in question.

Of the cargo ships the Hog Island type has been found to be the most desirable for general service. The Submarine Boat Corporation type is well fitted for service in the Baltic and Scandinavian trade. Light-draft lake-type vessels are admirable for the West Indies trade, particularly the south ports of Cuba. Larger lake-type vessels are well suited for various coastwise services and in trade to northern ports of Cuba. Nine of the larger lake type are employed in our oriental feeder service, this service calling at the smaller outports, collecting cargo, and bringing it to the regular ports of call. Vessels of the 8,800 deadweight class and also the 9,500 deadweight are especially suitable for the cotton and grain trade on account of their size, but during the off cotton and grain season great difficulty exists in filling ships of this size on the same

berth and maintaining the same schedule as would exist during the cotton and grain season. At such off-season periods vessels of the Submarine Boat Corporation type and our Japanese constructed type, approximately 6,400 deadweight, are considered more suitable as substitutions, while the larger ships are diverted to other services.

#### TANKERS.

During the year the demand for tanker tonnage increased, and the ships under the control of the Board were in constant service.

The principal routes covered by our tank steamers are between Mexican Gulf ports and United States Gulf ports, United States North Atlantic ports, and to our foreign stations at St. Thomas, Virgin Islands, Brest, and Bizerta. On the Pacific the lines are from San Francisco to our foreign stations at Honolulu, Manila, and Shanghai.

Total amount of oil carried by our tank steamers from June 30, 1919, to June 30, 1920, was 3,641,362.95 tons.

Of the above total of oil carried in our steamers, 108,019.66 tons were carried to our foreign bunkering stations. During this period there was also carried in Shipping Board tankers 139,388.79 tons of molasses and 10,714.46 tons of vegetable oil.

#### TUGS AND BARGES.

The tug and barge section at the present time is operating 27 steel seagoing tugs, of which 1 is stationed permanently at Bermuda to assist Shipping Board steamers and 2 at New Orleans, the balance operating on the Atlantic seaboard in the various trades. Twelve to fourteen of these tugs, from time to time, are towing barges in the New England coal trade between Hampton Roads and eastern ports, the balance in the South Atlantic lumber, piling, and general offshore trade to Habana; also, any other business which may offer, such as dry docking, dredges, etc.

Ten wood harbor tugs are now being operated, two under the supervision of the Division of Operations, New York, two by the custodian of wooden ships at Newport News, Va., three tugs with water-tube boilers at Philadelphia, and the balance by local operators for the time being until purchase is effected.

Towage in the last three months has been offered freely, and there seems to be plenty at the present time. If coal can be secured at tidewater points, there should be a heavy movement of barges loaded with this commodity for New England points during the coming fall, which will keep the tugs well occupied, in addition to services rendered Shipping Board steamers for the various divisions.

All barges constructed by the Corporation have been sold.

## COASTWISE COAL.

## Types of Vessels Used.

During the past year the shortage of coal in New England has made it imperative that as much as could be handled be assigned to that trade. Consequently all types of vessels have been used in the trade without particular reference to type, since spot tonnage was needed and what was available at the moment had to be used.

The tabulation below gives a good idea of the various types of vessels which were used in the New England coal trade during the past year:

	Percentage of total.
Wood steamers (Ferris with one exception).....	17
Concrete steamers .....	4
New "lake-built" steamers.....	43
Purchased or converted "lakers".....	6
"West" or 8,800-ton type.....	5
New steel cargo tonnage under 7,000 deadweight tons.....	5
New steel cargo tonnage over 7,000 deadweight tons.....	21

## WOOD SHIPS.

## Maximum Tonnage Operate at One Time.

The maximum number of wood vessels, 240, aggregating 874,155 deadweight tons, was in active operation during the month of April, 1920. On June 30, 1920, there were 170 wood vessels, aggregating 628,384 tons, in active operation.

## Principal Trade.

There were more wood vessels engaged in the trans-Atlantic coal trade, approximately 20 per cent of the active wood fleet on June 30, 1920, than in any other one service; the New England coal trade, with approximately 10 per cent, ranking second. Five wood vessels, aggregating 18,432 dead-weight tons, were operating under the supervision of the London office as of June 30, 1920.

## Suitability for Certain Uses.

Taking into consideration the fact that nearly 50 per cent of the wood vessels under active operation as of June 30, 1920, were engaged in various trans-Atlantic trades, at least that proportion of the wood vessels would be suitable for carrying bulk, general cargo, or trans-Atlantic. A study of the relative steaming radius of principal types of wood vessels would be valuable in determining the uses for which they are most suitable.

Types.	Steaming radius.	Types.	Steaming radius.
	<i>Miles.</i>		<i>Miles.</i>
Ballin.....	3,600	Grays Harbor.....	2,450
Daugherty.....	5,000	Hough.....	2,700
Ferris.....	3,000	McClelland.....	2,600

**Coastwise.**

Wood vessels with a relatively shorter steaming radius could be profitably employed in coastwise trade. Approximately 10 per cent of the wood fleet in active operation on June 30, 1920, was employed in the New England coal trade.

**OPERATING DEPARTMENT.**

Up to February 1, 1920, the supervisors, pursers, deck, engineer, radio, and supply departments were individual departments independent of one another, but under the reorganization were consolidated in one department known as the operating department, exercising general supervision over all operating phases in connection with Shipping Board vessels. The supply department was recently transferred from the operating department and placed under the direction of the supply and sales division, leaving only the bunkering section of that department under the supervision of the operating department.

In general, the operating department exercises control over the following operating matters:

(a) Vessel personnel. Handling all matters of dispute and administering Shipping Board policies with respect to crews and keeping records of officer personnel.

(b) Approving bunker schedules, arranging supplies at foreign fuel stations, and keeping operators advised of the most advantageous bunkering schedule to follow.

(c) Supervision of radio apparatus and radio operators on Shipping Board vessels.

(d) Checking the efficiency of managers, operators, and managing agents in operation of Shipping Board vessels. Exercising control over all vessels in distress and arranging relief.

(e) Control of supercargoes.

(f) Establishment and supervision of foreign agencies. Checking allocation of vessels in order that vessels will be assigned to employment and trades for which they are best suited.

**Vessel Personnel.**

*How officers are obtained.*—The Steamboat Inspection Service of the Department of Commerce grants licenses upon examination to such men from the ranks of seamen as qualify after diligent inquiry as to character has been made and after the inspectors are satisfied that they have capacity, experience, and habits of life which warrant the belief that they can safely be intrusted with the duties and responsibilities of the station for which they make application. Licenses are granted authorizing these men to discharge such duties for a term of five years, but licenses shall be suspended or revoked upon satisfactory proof of bad conduct, intemperate habits, incapacity, inattention to duties, or the willful violation of any pro-

visions of the Steamboat-Inspection Service. This is applicable to both deck and engineer officers.

The United States Shipping Board has established since June, 1917, in different sections of the country various schools for the training of officers in navigation and engineering, and since July, 1918, over 1,000 graduates a term have been turned out, a term in the engineering school being one month and in the navigation school six weeks.

*Attractions of the service.*—This service is made attractive through the following reasons:

1. There is no trade, occupation, or profession which offers more opportunity for rapid advancement to positions of responsibility and good pay. When the wages paid to crews of our merchant marine, together with quarters and meals furnished by the ship, are considered it can be seen that they are much better off than the average young men in other callings.

2. The crew complement of a ship averages one officer for every five men, and the opportunities for promotion are good.

3. Any man with high school education or better may become a third officer after one year's sea service, and men who are less fortunate in educational advantages may become a third officer after two years' sea service.

4. It is possible for a man to be in command of a vessel at the expiration of five years after he first enters the service; however, this is not an average opportunity and progress depends entirely upon initiative, ability and aptitude for the work.

5. Opportunities do not end when a man becomes master or chief engineer, as large steamship companies or commercial organizations are constantly in need of men who have obtained practical experience through sea training for responsible shore positions.

*Ideal conditions on board Shipping Board vessels:*

The majority of United States Shipping Board vessels have all been constructed with the very latest ideas of shipbuilding, and splendid accommodations are afforded both officers and members of the crew. In addition to this the very best of food is provided. Congress has enacted legislation which places seafaring men on an equal basis with those of industrial organizations, to the extent of regulating their time on duty, and unless the safety of the vessel requires, in no case is a man compelled to work in excess of 8 hours per day without being amply compensated by extra remuneration.

*High standards:*

The United States Shipping Board, Division of Operations, maintains expensive marine forces at all large American ports and at principal foreign ports to assist in the maintenance of crew efficiency. Inspection of all Shipping Board vessels is made upon arrival at

port and immediate steps are taken to correct unsanitary conditions which might exist. Experienced construction and repair men are also employed and every care is taken to see that all vessels are kept in a seaworthy condition, the best of materials being furnished.

*Record of personnel:*

The marine department of each United States port is responsible for that portion of Shipping Board vessels whose managing agents or operators are located in their district, and service records of all officers for such ships are furnished in duplicate, one copy being retained at the port office and the other forwarded to headquarters at Washington, thus making it possible for the Shipping Board to be fully informed on all officers in its employ.

*Investigation of complaints.*—Upon receipt of information from various sources on acts involving gross negligence, graft, or other conduct unbecoming an officer or member of crew, the case is thoroughly investigated upon the arrival of the vessel in port by the marine department. If the person in question is found guilty of the charges preferred against him, he will be denied further employment for a period of time, depending upon the nature of the offense, and if his conduct was in violation of United States Steamboat Inspection Service regulations the case is brought to their attention with a request that licenses be revoked. The various district officers are advised of any person who is placed on the deferred employment list, and it is impossible for him to secure employment on a Shipping Board vessel until he has been reinstated.

Whenever reports of meritorious conduct or the efficient handling of a vessel are received, these reports are filed with the man's personnel service record, and when it is found necessary to fill or create new shore positions with the Shipping Board these reports are consulted and given due consideration as a guide in making the proper selection.

*Obtaining crews.*—Under ordinary conditions little difficulty has been experienced in securing crews, although at times there have been obstacles on account of contemplated change in working agreements.

*Appointment of personnel.*—Permission is granted to operators and managers of Shipping Board vessels by the Shipping Board to appoint their own officers and crew, but before such appointments are effective our marine department of the Corporation must approve same to eliminate the possibility of undesirable officers securing employment.

It is the policy of the United States Shipping Board to employ only Americans when possible, at all times, and until February 7 of this year, when presidential ruling was effected which barred all

aliens from securing licenses who had not declared their intention of becoming American citizens after that date, the Board allowed men holding so-called "red-ink" licenses employment on its vessels limited to 4,000 dead-weight tonnage. Since the date of the Executive order above referred to it has been impossible to limit employment of men holding such licenses to stipulated tonnage, and instructions have been issued to all districts requesting that strict observance be given to selection of officers, giving preference to American citizens, and also to observe applicants holding provisional licenses to see that such men had declared their intention of becoming American citizens before February 7.

#### **Bunkers.**

*Importance in operation.*—Fuel is the largest single item in the cost of ship operation, with the possible exception of repairs. The price of fuel, both coal and oil, has not only kept pace with the increases in other operating expenses but has proportionately exceeded most other items, and the difficulties of obtaining sufficient supplies have been enormous. This situation was anticipated in the summer of 1919 and the bunker section was organized under the Division of Operations for the specific purpose of utilizing available supplies of fuel in both domestic and foreign ports to the best general advantage consistent with efficient operation.

After a careful study of the world-wide fuel situation as a single problem this section has been able to determine upon certain strategical points on the various trade routes where it is believed fuel supplies must be maintained. In this study all the conditions met in actual practice have been considered, such as types of vessels in the particular trade, steaming radii, port facilities, distances from sources of fuel supplies, geographical location as regards proximity to acceptable sailing routes, nationality of port, etc. Having determined the strategical points, this section next worked out the number of vessels that would require fuel at each point and approximately the kind and quantity each would require, and in this way has been able to determine roughly the yearly requirements of fuel at the points selected.

On account of the many widely scattered and well-equipped coal-bunkering stations and natural sources of supply throughout the world it has not been necessary to adhere so closely to a few definite ports, except, of course, in emergencies created by labor troubles, unfair discrimination, etc., but rather to watch closely the supplies and demands of a certain zone.

In the case of fuel oil, however, the privately owned bunkering stations are few, and supplies can not be depended upon as to price or quantity. This has necessitated the establishment of our own, or



encouragement of American corporations to establish, bunkering stations at the predetermined strategical points on the various trade routes. In view of the fact that practically our entire fuel-oil supply is dependent upon our tank steamer fleet for transportation, it has been necessary to concentrate fuel-oil deliveries to a comparatively few ports.

One of the functions of the bunker section is to maintain records showing the demands that will be made for fuel in the immediate future upon the various zones and ports of the world. This requires an individual proposed bunkering performance on each vessel well in advance of actual bunkering date. By making a compilation of these performances it is possible to estimate very accurately the quantity and date of demands on the various fueling ports and to arrange for supplies accordingly.

*Cooperation with fuel section, division of supply and sales.*—In the problem of supply and demand, the Bunker Section represents “demand” and the fuel section of the division of supply and sales represents “supply.” These two sections cooperate very closely with the object of making the two elements balance as nearly as possible. Many difficulties arise which make a perfect balance impossible, but these are disposed of by compromising as necessary to meet the general situation.

*Weekly bunker bulletin.*—The general fuel situation is incorporated in a bunker bulletin issued jointly by the bunker section, Division of Operations, and fuel section, division of supply and sales. This bulletin is corrected weekly and supplied to interested officials in the home and field offices. The bunker bulletin shows the immediate situation at all the principal bunkering ports and gives the following information on each:

1. Estimated monthly requirements.
2. Source of supply.
3. Prices.
4. Present stocks.
5. Outlook.
6. Bunker policy to be followed.

*Bunker schedules.*—With a knowledge of the general fuel situation as contained in the bunker bulletin, schedules are prepared for the individual ships in the most practical way possible, and an effort is made at all times to retain the balance of supply and demand as far as consistent with efficient operation.

*Purpose and results of proposed bunker schedules.*—For this purpose each ship is considered as a problem in itself, and the managing agent is required to submit a standard form “Proposed bunker schedule” to the district director at the vessel’s loading port as far

in advance of the actual loading as practical. This proposed bunker schedule shows:

1. Name of vessel and type.
2. Ports of call in order with expected date of arrival of each.
3. Distances between ports and time estimated to be consumed in passages.
4. Amount of fuel estimated to be aboard on arrival and departure from each port.
5. Amount of fuel estimated to be taken at each port, if any.
6. Performance figures upon which schedule is based, i. e., speed, consumption, bunker capacity, kind of cargo, freight rate, etc.

Upon receipt of the proposed bunker schedule from the managing agent the district director approves, or, if necessary, alters it to meet fuel conditions as outlined to him in the bunker bulletin. Copies of all approved bunker schedules are forwarded to the bunker section, Washington, and from them records are prepared to show fuel demands on the various ports of the world. The proposed schedule on each ship during the progress of the voyage in question is checked against actual performance.

From these records it is possible to obtain, immediately, lists of all ships approaching particular ports for fuel; and in cases of failure of fuel supplies to arrive on schedule or other emergency it is found practicable to make divisions, to instruct transfers of fuel from ship to ship etc., as circumstances warrant.

*Emergencies.*—In cases of bunkering congestions and delays, authorization is issued for preference in obtaining fuel supplies, and action is taken to clear up the situation with the minimum possible damage to the general interests involved.

#### Radio Section.

On May 19, 1919, the first steps were taken to organize a radio department in the Division of Operations. Prior to that time all radio work for the Shipping Board was handled by the Navy Department. The Navy had furnished radio operators for all ships; had purchased and installed new radio apparatus on all ships constructed by the Shipping Board; had purchased for the Board all apparatus formerly rented by the Board from the radio companies; and had kept all apparatus in repair.

Owing to the gradual reduction of the personnel and the activities of the Navy, it became desirable for the Shipping Board to take over control of its radio service. With this end in view, an officer thoroughly familiar with the Navy's radio service was detailed to the Shipping Board and made the head of the radio department. The radio department was later abolished and the radio section of the operating department was established, with the same personnel and functions as formerly.

During the past year the Shipping Board has been rendered entirely independent of other Government departments as far as radio service is concerned, with the single exception that the Navy Department is still furnishing radio apparatus for all ships under construction, as the Navy purchased during the war sufficient radio apparatus to complete our entire building program.

The personnel of the radio section now numbers approximately 35, 8 in Washington and the remainder in the various districts. In each district there is a radio supervisor, with one or more inspectors and the necessary clerical force. Radio operators in the employ of managing agents appointed by the Division of Operations number approximately 2,000. When Navy radio operators were removed from all Shipping Board vessels it was found very difficult to secure civilian operators to take their places. Some few ships were allowed to sail without operators; but by stimulating recruiting in every way the supply was gradually brought up to the demand until there is now a surplus of radio operators in practically every port.

During the year outstanding obligations to the Navy Department amounting to approximately \$600,000 were cleared up. The matters involved were principally certain radio apparatus which had been purchased by the Navy Department for the Shipping Board, expenses in connection with keeping radio apparatus in repair, and the settlement of message toll accounts.

Approximately \$500,000 worth of surplus radio equipment was disposed of. Some of this equipment was installed on other Shipping Board vessels, and some of it was sold by public bids. Still other sets of the apparatus were sold to shipowners; this was especially the case where the apparatus was installed aboard requisitioned ships.

To care for the radio apparatus on all ships, handle the accounting in connection with each message sent, furnish radio operators at all times on short notice, furnish all necessary blank forms, secure the licenses required by law, etc., contracts were entered into with three commercial radio companies, the ships being equally divided between the three companies in order to stimulate competition. These contracts were drawn with great care, containing the best features of all commercial contracts for radio service which were then in existence, as well as many features for the Board's protection. The radio supervisors in each district exercise careful supervision over the work of the radio companies, assign new ships equally between them, and arrange to discontinue service when a ship is sold.

Each radio company is required to take an exact inventory of all radio equipment aboard a vessel as soon as it is assigned, and the radio section now has in its files the inventories of all radio equip-

ment on board practically every ship owned by the Shipping Board, the total value of the sets being in the neighborhood of \$6,000,000.

In addition to the radio work the radio section has jurisdiction over all matters in connection with the submarine signal apparatus installed aboard each steel ship. This apparatus is rented from the Submarine Signal Co., of Boston; its principal value is detecting the sound of a submarine bell installed on a lightship or other point during foggy weather. Radio supervisors in every district cooperate with the officials of the Submarine Signal Co., authorizing them to install the apparatus on new vessels, directing them to remove it from all vessels sold, having repairs made, etc.

The revenue from wireless messages is small compared with the cost of the service, amounting to only about \$1,000 to \$2,000 per month. The great value of the radio equipment, however, lies in the saving that can be made by diverting ships from one port to another while still far at sea when local conditions, such as strikes, etc., render diversion advisable, and in the indispensable aid to vessels in distress. It is significant that not a single vessel out of a fleet of more than a thousand has been lost without a trace since the contracts with the commercial companies were signed and each outfit given a thorough overhauling. During the winter months several hundred vessels were in distress at one time or another, and assistance was dispatched to each one in reply to distress calls sent out by radio, resulting in the saving of thousands of lives and millions of dollars worth of property.

#### Supervisors' Section.

Until December, 1919, this section was maintained in Washington and was responsible for supervision over all Shipping Board vessels, the purpose being to obtain quick turn arounds, thus effecting great savings in the cost of operation. After careful study of conditions it was decided that more efficiency could be obtained by decentralizing this section and having the supervisors work in the districts in which the ships make their home port. The system of having certain ships assigned to certain supervisors was discontinued, and the supervisors were made responsible for operators and managers in the districts in which they were located. This has resulted in closer cooperation between managers and operators and the United States Shipping Board.

A skeleton force is maintained in Washington, which acts in a general advisory and supervisory capacity, receiving certain critical reports and maintaining a close follow-up of special cases of mismanagement on the part of the agents.

The supervisor assumes the position of actual owner of the vessels which he supervises, and from this standpoint checks the perform-

ance of the vessel from reports rendered him by the operators and by other agencies, such as supercargo and investigator. From these reports it is possible to determine whether the vessel as managed by our operator is being handled efficiently and to follow the performance of the vessel in every respect so as to effect savings at each opportunity.

The supervisor receives daily loading reports from the operator, supercargo, and investigator. These reports show in detail the working of the cargo for the day preceding the report. In the event that the cargo is being loaded slowly, the supervisor institutes an immediate investigation, frequently going on the dock in person. If the delay in loading is due to the slow arrival of cargo, the matter is taken up with the traffic department to determine the cause, and effort is made to expedite shipments.

The supervisor keeps in constant touch by telephone with the operator, and this system, together with the reports received by him from the supercargo and investigator, permits the supervisor to be conversant at all times with complete details covering loading activities.

The loading of the vessel is given particular attention by the supervisor, as it is in this phase of the work that the most serious delays occur, and much has been accomplished toward reducing loading delays to a minimum. The main cause of the difficulties, however, has been the slow delivery of cargo at the docks.

The same procedure is followed in connection with discharging of cargo from vessels on arrival at port.

On vessels returning from foreign ports in ballast, the supervisor obtains and checks up the report of outturn upon the discharge of this ballast and compares the figures shown with the figures indicated by the operators, supercargo, etc.

Upon the arrival in a United States port, vessels are inspected by the marine department as to condition of the hull, deck, life-saving equipment, living spaces, storerooms, galley, holds, bilges, etc., and a complete report on the survey is made. Careful inspection is made of the crew's quarters to insure maintenance in first-class condition. Aggravated cases are immediately drawn to the attention of the managing agent, with instructions to take steps to remedy existing conditions. These reports are used by the supervisors section as an indication of the manner in which the managing agent is handling our vessels and form the basis for reports on the efficiency of the operator. The marine department and the supervisors in the district necessarily work in close cooperation in this matter and joint action is taken in many instances.

The supervisor is not responsible for repair work, as this is handled entirely by the Division of Construction and Repairs in conjunction with the American Bureau of Survey. The supervisor, however, keeps a close check on the progress of repairs and institutes immediate investigation of cases where the managing agents have not included in their first requisition all the repairs required. When cases come to the attention of the supervisor showing the necessity for alterations, etc., aboard ship, this information is immediately referred to the department concerned, with the request for advice of action taken.

Under the system in force it is possible through the agency of the supervisors section to establish a certain uniformity in the methods adopted to settle the many problems which arise in the handling of business incident to the operation of ships, and it is the policy to introduce standards whenever possible which in the experience of this section have proved satisfactory.

#### **Vessel Distress.**

In addition, the vessel distress section is located in Washington and handles all distress cases of vessels directly from this office.

When advice regarding a vessel in distress is received by radio, or from other sources, action is immediately taken through various available agencies to clear up the situation. This is done sometimes direct by radio, or at other times, through the district as the situation warrants. If through the districts, tugs or coast-guard cutters are called on, the district thus handling the matter when so instructed. When a vessel is stranded and wrecking outfits are required to assist her, the matter then comes into the immediate hands of the Division of Insurance. That division and the vessel distress section are in close touch and keep each other informed of the developments in any given case.

In all cases the operators and managers are kept informed through the districts of the initial situation, developments, and the conclusion. This section also keeps in close touch with the Construction and Repair Department, and where applicable the bunkering section, as to where a vessel shall be towed or go for repairs or fuel, as the case may be, taking care to avoid at all times needless diversion of vessels with cargoes.

In connection with the above, a daily bulletin is published showing in detail the disability, the remedy, and the result. This gives a first-hand picture of current vessel disability and furnishes the district concerned the data necessary to assist the auditors, supervisors, and others in maintaining a proper check and in compiling their respective reports.

The following is a compiled relative analysis of vessel disability made from the Navy Department's Daily Shipping Bulletin of March 26, 1920. Disabilities occurring during the fall and winter of 1919-20 are listed in the bulletin. In compiling this analysis, reference to vessels was omitted if the bulletin failed to specifically show that repairs in progress in port were due to particular voyage disability, rather than ordinary wear and tear.

A preponderance of American schooner disability is noted. The analysis is of interest in that with the renewed interest in the American merchant marine there may have been overemphasized publicity re the disabilities incurred by Shipping Board vessels:

	Per cent.
American shipping (not Shipping Board owned), 132 vessels out of 2,163, or.....	6.1
United States Shipping Board, 88 vessels out of 1,619, or.....	4.7
British, 211 vessels out of 4,086, or.....	5.1
Japanese, 18 vessels out of 433, or.....	4.1
Other foreign vessels, 290 out of 4,165, or.....	6.9

From the above it can readily be seen that the disability of Shipping Board vessels is considerably below the average of the world's tonnage.

#### Supercargo Section.

By May 1, 1919, the supercargo section had succeeded in placing 350 supercargoes aboard Shipping Board vessels, whose duties were those of the representative of the owner. They were to assist the masters of the vessels in all clerical work, as well as to report on conditions in favor or against the vessel, its management, crew, etc., and also to make a detailed study of shipping facilities in foreign ports. This number was increased by September 2, 1919, to 725, when further assignments were discontinued and the supercargo school was abolished. This had formerly been maintained in Washington for the purpose of instructing supercargoes before assignment to vessels. On June 30, 1920, the Board had 500 supercargoes employed on our vessels. The difference between 725 under date of September 2 being due to resignations, death, dismissals, or transfers to other departments, foreign agencies, etc. Approximately 50 supercargoes have been appointed as supervisors; assistants to port agents at Rio de Janeiro, Buenos Aires, and Habana; as dispatch agents at Gibraltar, Hamburg, Azores, Danzig, and Barcelona; and as supply officers at Liverpool, Rotterdam, and Cardiff. From this it can be clearly seen that the Shipping Board has been benefited materially in the schooling of young men that their services might be used in the establishment and maintenance of a 100 per cent American merchant marine.

Many requests are received from operators, managers, and masters of our vessels that supercargoes be assigned.

**Special-Service Section.**

This section is responsible for all operating matters not included in the functions of the foregoing sections and in the main deals with the establishment of foreign agencies. To date agencies have been established in Europe as follows:

United Kingdom.....	9	Poland and Germany .....	2
France.....	8	Finland.....	1
Italy .....	14	Spain.....	2
Holland and Belgium.....	2	Egypt .....	1
Denmark and Sweden .....	2	Turkey .....	1

Besides these, agencies have opened in the following places:

Habana, Cuba.		Hamilton, Bermuda.
Rio de Janeiro, Brazil.		Buenos Aires, Argentina.
Horta Fayal, Azores.		Yokohama, Japan.
Shanghai, China.		Manila, P. I.
Tampico, Mexico.		

Consideration is now being given to the establishment of agencies at the following places:

Spain.....	2	Orient.....	6
Levant.....	5	Africa.....	6
Germany.....	3	Oceania.....	3
Scandinavia.....	4	South America .....	4
West Indies.....	2		

It is further the duty of this section to review all allocations now being made by the allocation committee and to make voyage calculations showing the approximate cost of operating vessels in a given trade with given commodities, to establish the fact as to whether or not vessels allocated to a certain trade will or will not make a satisfactory profit. Voyage calculations are also made by this section for use by the traffic department when considering rates and rate differentials.

From reports received through supercargoes on conditions at ports all over the world, this section has made an analysis and at present is compiling into a complete and comprehensive book form all the information at hand with the intention of distributing same to Shipping Board and other Government departments and persons interested. To date, besides a number of special reports, all the data on South American ports has been compiled. These reports have proven very useful, as they contain such information as depth of water, regulations, facilities charges, and other conditions encountered, all of which must necessarily be considered when passing upon the allocation of vessels to determine whether the port in question is safe and can amply accommodate vessels which the Board wishes to allocate.



## CONTRACT BUREAU.

In the contract bureau all documentary evidence appertaining to the contractual obligations of the Division of Operations is centralized. The activities of the various sections cover the following subjects:

**Demurrage, Off Hire, and Savings Section.**

The activities of this section are principally of a threefold nature—off hire, demurrage and dispatch, and savings, as provided for in clause 22 of the time-form requisition charter.

(a) *Steamer demurrage.*—Whenever possible it has been the practice to supervise, rather than undertake, the adjustment of steamer demurrage. When operators with the assistance of our districts organization have been unsuccessful in their efforts to conclude satisfactory adjustments, complete details are dispatched to this section, at which time all phases of each case are carefully reviewed.

Appropriate action is taken toward those in default, and has resulted in the collection of approximately \$900,000 in steamer demurrage. At the close of the fiscal year steamer demurrage of approximately \$2,500,000 was still under consideration, in addition to the question of demurrage accrued on account of cargoes consigned to other Governments. This section drafted and placed in use "Masters' report of loading and discharging," by means of which necessary and uniformly presented details, together with authentic information covering all loading and discharging, is always available and greatly simplifies and expedites the rendering of decisions.

(b) *Off hire.*—Collection or credit on account of off hire has been secured in the approximate amount of \$600,000 during the fiscal year. In instances where owners have refused to acknowledge off hire, the general comptroller has been instructed to withhold from final settlement an amount sufficient to cover the period involved. Close liaison has been maintained with the admiralty division relative to our rights under the breakdown clauses of charters, and off-hire questions have been passed upon in accordance with the strictly legal rights of the Corporation.

(c) *Saving.*—Practically all claims of the Board involving savings due under clause 22 of the time-form requisition charter have been satisfactorily adjusted. The clause referred to is as follows:

22. In the event of loss of time from deficiency of men and stores, breakdown of machinery, stranding, collision, dry-docking for the purpose of examining or painting underwater parts or making any repairs, or from any other cause preventing the working of the vessel for more than 24 consecutive hours, the hire shall be reduced one-half until the vessel be again in an efficient state to resume her service: *Provided, however,* That in case of loss of time in a port in the war zone, or at sea, due to any such cause, no such reduction shall be

made if the owner shall show that he used due diligence to avoid such loss of time: *Provided further*, That there shall be no reduction of hire on account of loss of time arising from a war risk. Should the vessel be driven into port or anchorage by stress of weather, or from any accident to cargo, detention or loss of time occasioned thereby shall not be the cause for any cessation or reduction of hire. In any case of loss of time for which no reduction of hire is made, credit shall be given to the United States for any expenses saved by the owner during such time.

Investigations and activities have resulted in approximately \$175,000 being credited to the Board.

#### **Charters.**

This section cooperated in the revision of the Washington coal form charter and assisted materially in the drawing of a standard form of coal charter party for the West Indies coal trade.

#### **Inventory Section.**

During the fiscal year this section has passed to the general comptroller final recommendations on 100 steamers, involving approximately \$600,000, of which amount \$450,000 was ordered disbursed in settlement of ship inventory accounts, while claims of the Board against owners for like accounts aggregated approximately \$150,000. When collections have been made from owners of requisitioned vessels for value of redelivery inventory accounts, the amount disbursed and the amount collected will approximately balance. Inventory adjustments remaining unclosed are distributed as follows: 60 on requisitioned vessels, 14 on Dutch steamers, and 11 foreign. Final adjustment has not been consummated on 21 Shipping Board vessels that were delivered as substitute tonnage.

#### **Reviewing Section.**

The records of this section disclose that redelivery of all foreign vessels, with the exception of two Peruvian steamers which the Board intends to purchase, has been completed. During the year 103 foreign vessels, of a total deadweight tonnage of 578,179, were delivered. The last of each class was redelivered by the Shipping Board to owners as follows:

Chinese, March 15, 1920.	Norwegian, February 13, 1920.
Cuban, March 22, 1920.	Russian, December 10, 1919.
Danish, October 25, 1919.	Siamese, January 13, 1920.
Dutch, November 8, 1919.	Swedish, November 20, 1919.

Approximately 137 wooden steamers have been delivered to managing caretakers to be assembled and stored, and a special agreement to cover this service is in course of preparation.

The new agency agreement for the management and operation of steel cargo steamers was put into effect on March 1, 1920, and the signature of 155 managing agents secured to this agreement. Up to and inclusive of June 30, 1920, 789 steel cargo steamers had been

delivered to managing agents. It is estimated that it will be two to three months before all remaining steel cargo vessels will have been transferred from the old form of managing and operating agreements to the managing agents agreement.

The general comptroller is furnished with certified copies of all charters, contracts, certificates of deliveries and redeliveries, and evidence of our rights and obligations under all contracts and charters upon which to initiate appropriate financial adjustments.

#### General Service Section.

The activities of this section have been the general handling of all miscellaneous matters within the jurisdiction of the contract bureau, and not properly within the functions of the various sections. Generally speaking, this section has jurisdiction over the chartering of wooden steamers, handling of surveys and lump-sum settlements on all vessels redelivered, settlement of questions of claims under all managing and operating agreements, and arranging delivery on all vessels sold; also the handling of details incident to securing bonds from all managers and operators of Shipping Board vessels.

(a) *Dutch vessels.*—Redelivery of all Dutch vessels has been concluded, the last steamer being redelivered on November 8, 1919, but this did not terminate our activities in this regard, as there were various claims from the different owners for wages of crews sent across to take redelivery of their steamers, also various claims for transportation of such crews, together with various claims for repairs, etc., during the term of charter.

(b) *Bonding of managers and operators.*—After it was decided to have all managers and operators file surety bonds to cover management and operation of Shipping Board vessels, this section set up the necessary machinery and issued appropriate instructions in order that this requirement might be promptly fulfilled. Bond in the amount of \$250,000 was required for the managing or operating of 1 to 5 vessels; over 5 to 20, a bond of \$500,000; and above 20, a bond of \$1,000,000.

(c) *Sale of ships.*—This section of the contract bureau is an intermediary between the Ship Sales Division and all other departments of the Division of Operations, being charged with all arrangements for delivery to purchasers of all vessels, including tugs and barges. About 421 steamers, tugs, and barges, with deadweight tonnage of approximately 2,204,700 tons, were sold and delivered during the past year. It might be pointed out that a certain portion of such deliveries is made up of vessels chartered with option of purchase, while the remainder constitutes delivery under outright sales.

This section is also charged with the interpretation of managing and operating agreements and the application of such interpretations to specific disputes and claims presented for adjustment.

**Seamen's Claim Section.**

In view of the fact that claims were from time to time received for personal injury, maintenance and cure wages, and loss of effects due to collision or other causes placing seamen in a destitute condition, the committee on operations of the board of trustees of the Emergency Fleet Corporation on December 18, 1918, authorized that aid be given to destitute seamen for the good of the service.

The power to negotiate and settle claims of this character was conferred upon the Director of Operations and in turn delegated to the contract bureau.

Claims are received in two distinct ways, the most common of which is for the claimant to submit his losses in affidavit form. Where immediate action is imperative, claims are presented to operators and paid immediately, subject to the regulations of this section, and applying only when crews are landed in destitute conditions.

Since the establishment of this section, 203 claims, aggregating \$34,757.34, have been received. Of this number 88 claims have been approved, involving a total of \$10,858.08. Of the remainder, 90 claims were disapproved, having been found unworthy of adjustment, leaving 25 claims still under consideration.

All crews are covered by protection and indemnity insurance, and consequently cases involving personal injury are referred to the Insurance Division, and only in instances where insurance is not applicable are cases considered by the seamen's claim section where personal injury is involved.

Authority given to the director by the committee and subsequently vested in the seamen's claim section provides that the section pass only on claims amounting to \$2,000 or less, and that claims in excess of this amount, if investigated and found worthy, be presented to the Board for its consideration and action.

In many instances, especially in cases where the crews sign articles on the Lakes to bring vessels to Atlantic ports, there have been misunderstandings as to whether the crews were entitled to return transportation to original point at which articles were signed, as provided in all articles for the bringing of vessels out of the Lakes. For a time it appeared that the failures of our operators to furnish such transportation would cause difficulty in obtaining competent crews to bring such steamers from the Lakes, but this section took immediate steps to advise all operators as to our liability in this regard.

The Board has established the necessary machinery to treat justly any and all claims presented by members of the crews and has endeavored to provide for the welfare of the men in the merchant marine.

### FINANCIAL OPERATIONS.

The activities of this office are chiefly directed to the collection and compilation of specific information pertaining to results obtained in operation of the United States Shipping Board vessels. By means of reports and statements from various sources having a direct bearing on vessels operations an endeavor is made to ascertain the earning capacity of vessels by classes and types, trade routes, commodities handled, etc. This office endeavors also to determine the various elements entering into the cost of vessels operation in classified form, with a view to effecting economies by which more satisfactory results may be obtained, and is responsible, moreover, for the approval of vouchers covering disbursements made by the Division of Operations.

### ORGANIZATION.

During the calendar year 1919 many of the activities of the Division of Operations were discontinued in the effort to reduce the organization to a peace-time basis. At the close of the year a co-ordination of the various interests became essential, and a complete survey of the division was begun in December, 1919, and completed in June, 1920. The home office of the Division of Operations at Washington was given first attention, followed by the district offices in New York, Boston, Philadelphia, Baltimore, Norfolk, and New Orleans.

The purpose of the survey was to establish a standard organization and uniform methods and procedure. The results were the combining and centralization of like activities, reduction in the number of departments, elimination of duplications, and decrease in the personnel. The savings effected were in the release of 641 employees, with salaries aggregating \$1,043,371, and miscellaneous incidental expense amounting to \$183,533, a total of \$1,226,904. In addition other savings were accomplished in connection with divisions which cooperate with the Division of Operations. These amounted to \$106,742, making a grand total of \$1,333,646 for the six months period.

All of this work was conducted without retarding the regular activities and was conducted with the object of eliminating duplication, establishing uniformity of organization and procedure, so that the business of the Shipping Board will be conducted along the same lines of efficiency and economy as in private business.



---

---

**UNITED STATES SHIPPING BOARD  
EMERGENCY FLEET CORPORATION**

---

**MISCELLANEOUS SECTION**

---

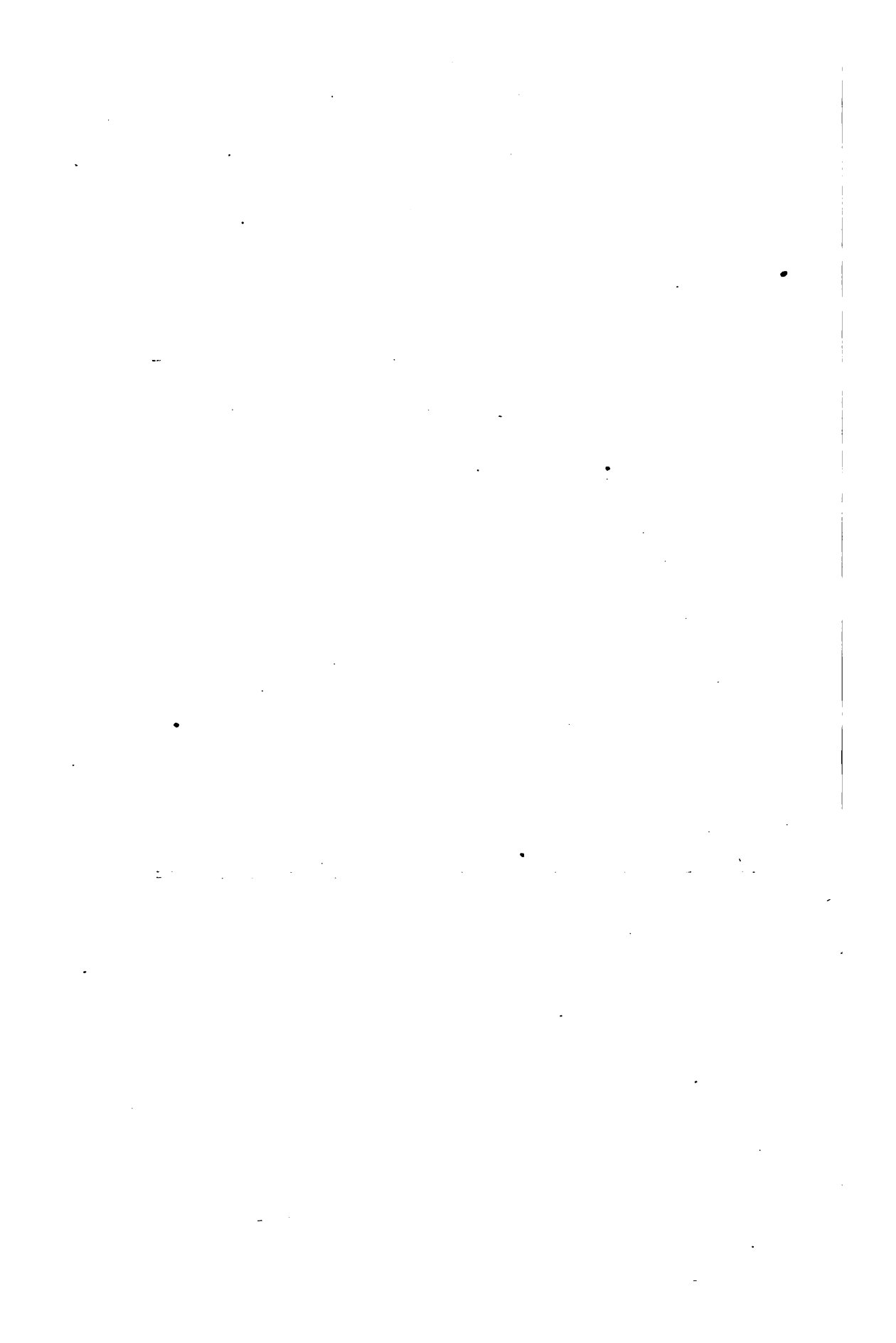
**Division of Supply and Sales  
Construction Claims Board  
Legal Division, Emergency Fleet Corporation  
Department of Investigation  
Report of General Comptroller  
Report of the Treasurer**

---

**PART IV**

---

---





#### **IV. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, MISCELLANEOUS SECTION.**

This section of the report includes the Division of Supply and Sales, Construction Claims Board, Legal Division of the Corporation, Department of Investigation, the reports of the General Comptroller and treasurer. These divisions and departments report directly to the President of the Corporation.

##### **DIVISION OF SUPPLY AND SALES.**

The activities of the Division of Supply and Sales for the greater part of the past fiscal year have been fivefold: First, the determination of what shipbuilding materials purchased and contracted for to meet the war program would not be required because of the contraction of that program as represented; second, the warehousing and field custody of vessel and plant construction materials the property of the Corporation, as they came under the jurisdiction of the division; third, the purchase of materials which by legal agreement with vessel-construction contractors the Corporation was required to furnish; fourth, the inventory and appraisal of all materials the property of the Corporation, and the inventory of property in which the Corporation has an investment interest; and, fifth, the sale of those materials when determined as surplus or salvage. In addition to the foregoing, the division until February 13, 1920, effected the cancellation of contracts for the production of ship and shipyard materials no longer required, and also negotiated settlements of claims arising therefrom. That activity, however, on this date was taken over by the Construction Claims Board.

On April 21, 1920, the former supply section of the operating department of the Division of Operations was united with the Supply and Sales Division, and since that time the division has carried on all purchasing for the Corporation except purchases made by the managing agents of the Corporation under their agreements and over which purchases the division will exercise supervisory control, and excepting, also, the purchase of office materials and supplies, which function has been exercised by the office supply division attached to the Shipping Board. In addition, this transfer carried with it the transfer to the Supply and Sales Division of the operation of all bunkering stations of the Corporation and the maintenance of all stocks thereat.

**Appraisals.**

From the beginning of the fiscal year and up to January 15, 1920, all appraisal work was directed from the home office, and consisted of making detailed, itemized valuations of all classes of material and equipment belonging to the United States Shipping Board Emergency Fleet Corporation located in the 250 shipyards and storehouses on the four coasts of the United States. In addition, complete appraisal reports were made of various manufacturing projects scattered throughout the country where contracts for ship-construction equipment were partially completed at the time the armistice was signed, and canceled thereafter. In January this work was decentralized and carried on thereafter by the district offices. The home office, however, exercised a general supervision over the appraisals and reviewed them when completed, making revisions wherever necessary.

In conjunction with the inventory department, a catalogue of all the material, equipment, and supplies which are available for sale by the Corporation has been prepared. Each item is shown, with its average cost, percentage appraisal, and valuation based on 100 per cent condition. This catalogue is not only of great value in assisting sales, but it tends to standardize the value of all the property of the Corporation.

**Inventories.**

*Plant and property.*—The work of inventorying the property of the Corporation, as represented by the "Plant and property account," is about completed. These inventories include to a large extent the reconciling of the contractors' accounts with the Corporation's vouchers covering expenditures at the various projects. The inventory of the Hog Island property, including ship material left as a result of cancellation of ship construction, in conjunction with its appraisal, is now in progress.

*Inventory of ship materials.*—The inventory department has, upon request, made various inventories of ship material in different parts of the country, although that is a function of the material section.

*Mortgage propositions.*—In March, 1920, the inventory department was assigned the investigation of the assets behind the loans made by the Corporation to contractors for plant-extension purposes.

**Material Provision and Custody.**

*Purchase, production, and inspection.*—Until the union of the supply section of the Division of Operations with the Supply and Sales Division, the purchasing branch of the material section functioned in making purchases for the division.

*Material control.*—The function of material control has been that of determining what materials were necessary to fill requirements and what surplus or salvage, the latter, when determined, being allocated as available for sale. In addition to material purchased by the division as supplies and in its warehouses, material has been turned over to the division from shipyards and other sources as surplus and salvage property of the Corporation and available for sale.

**Traffic Branch.**

It has been the function of this branch to notify the various departments of the Corporation in regard to rail rates, routes, and general traffic information. It has also handled all the freight claims arising from shortages and damages.

**Purchasing.**

This department makes all the general purchases for supplies required for the ships under operation by the Corporation; in addition exercises a general supervision over the purchases made by others for its account. While heretofore purchases for ships managed by private steamship companies for account of the Board have been made by these companies, because of the many advantages to be derived from contracting in bulk for the total requirements of the fleet covering more important items of supplies, the Board has adopted the policy of covering such requirements by contract.

Adequate provision for bunkering American ships abroad is vital to the supremacy of the American merchant marine, and to this end the plans of the Board contemplate the establishment of adequate coal and oil bunker stations at strategic ports on the principal world trade routes. Fuel-oil stations have been established at St. Thomas, Rio de Janeiro, Brest, Bermuda, Shanghai, Manila, Honolulu, and Bizerta, and stations are arranged for at Iquiqui, Arica, Callao, Hamburg, Genoa, and Savona, at which points stocks of fuel oil will shortly be available. Plans are also made which contemplate the establishment of additional stations at the Azores, Cape Verde Islands, Durban, Colombo, Sydney, Wellington, Hongkong, and Singapore.

**CONSTRUCTION CLAIMS BOARD.**

**Organization.**

The Construction Claims Board was created on February 1, 1920, to succeed the general cancellations, claims, and contracts board. The function of the former board was essentially that of a board of review, whereas the present board has full and complete jurisdiction over the negotiation and settlement of all claims submitted to it. The former organization for the settlement of claims and the condi-

tions which lead to the establishment of the present Construction Claims Board are briefly reviewed below.

Under the procedure originally established for the settlement of construction claims as distinguished from cancellation claims, the investigation and negotiation of such claims was conducted by the organization of the Ship Construction Division, and recommendations for settlement were submitted by the manager of that division to the vice president and general manager of the Corporation.

The cancellation on a large scale of ship contracts immediately preceding and following the signing of the armistice in 1918 created a new series of claims, and on November 20, 1918, the vice president and general manager was authorized by the board of trustees to settle all claims which in his judgment should be acted upon at once to effect the greatest economy. The first step in this direction was the establishment, on December 5, 1918, of a division known as the division of cancellations, adjustments, and salvage, for the purpose of handling the investigation and negotiation of all claims arising out of the suspension and cancellation of prime ship contracts. The negotiation of so-called construction claims by the Ship Construction Division, mentioned above, was continued in accordance with the procedure set forth in General Order No. 9, as amended January 30, 1919.

The number of cancellation claims soon grew to such an extent that it became advisable to establish a separate board for their consideration and settlement. The cancellations, claims, and contracts board was accordingly organized on March 22, 1919, with authority to effect settlement of all claims involving the payment of \$50,000 or less. Its jurisdiction over claims, however, was limited to the review and approval of the settlement of claims arising out of the suspension and cancellation of contracts and commitments administered by the various divisions of the Corporation. The board was given similar jurisdiction over so-called contract or construction claims and over recommendations for the award of contracts covering the construction of vessels and hulls, the installation of hull and propelling machinery, construction of dry docks, floating docks, and marine railways, including supplemental contracts or agreements involving an essential change in the relations between the contractor and the Emergency Fleet Corporation.

At the same time supervision over the negotiation of cancellation and construction claims, including supply contracts and commitments involving an original price of \$50,000 or more, was transferred from the division of cancellations, adjustments, and salvage to the office of the assistant in charge of cancellations. The latter office was created in the office of the director general to take the place of the former division of cancellations, adjustments, and

salvage, abolished as of March 22, 1919. The settlement negotiations on supply contracts and commitments involving an original price of \$50,000 or less were being conducted by the manager of the supply division, subject to the approval of the final settlement by the assistant in charge of cancellations, and the cancellations, claims, and contracts board.

As originally organized the cancellations, claims, and contracts board consisted of five members, all being active in the work of the Corporation. It soon became evident, however, that with the increasing number of claims a board whose membership was composed of officials of the Fleet Corporation who had other duties to perform could not satisfactorily dispose of the claims that were submitted to it. The board was accordingly reorganized on July 16, 1919, to consist of six members, five of whom were to devote their entire time to the work of the board.

From time to time the personnel of the board was changed and its jurisdiction enlarged to cover the sale of property certified to the Emergency Fleet Corporation as surplus, and to take charge of other matters incident to the contractual relations of the Fleet Corporation with contractors, subcontractors, and vendors.

As the progress made by the board in the settlement of claims was dependent, in a measure, upon the rapidity with which the claims were being investigated and negotiated by the other agencies established for this purpose, the board soon came to feel that a decentralization of that function was necessary if greater progress was to be made in the settlement of claims. A second reorganization accordingly followed, and on September 9, 1919, the office of assistant in charge of cancellations was abolished and the work of negotiation of claims was transferred to and placed under the control of eight newly created district cancellations, claims, and contracts boards. Special authority was given to the district boards on the Pacific coast to effect settlements of all claims of vendors and subcontractors in that territory resulting from the suspension of cancellation of vessel contracts and contracts and purchase orders placed by the Supply and Sales Division involving the payment of not more than \$10,000.

The membership of the district boards consisted of the district manager, district comptroller, district plant engineer, district supply and sales manager, and a secretary appointed by the chairman of the district board and selected from the organization of the Corporation. The name of the cancellations, claims, and contracts board was changed to general cancellations, claims, and contracts board. In other respects the jurisdiction and organization of the general board remained practically the same.

This change in procedure, designed to speed up cancellation settlements, was clearly not successful, due to the fact that the members of the district boards were not directly responsible to nor under the control of the general cancellations, claims, and contracts board, and further to the fact that its members in their capacity as direct officials were already so overburdened with work that they could not devote the necessary time to the work of consummating cancellation adjustments. During the period from October 1, 1919, when the district boards first began to function, until February 1, 1920, very little constructive work was accomplished on the adjustment of prime ship cancellations. This, together with the fact that a board of five members was regarded too large for the expeditious settlement of claims, was no doubt the chief consideration that led to the abolishment on February 1, 1920, of the general and district cancellations, claims, and contract boards and the establishment of the present Construction Claims Board. The membership of the new board was limited to three members.

The jurisdiction of the new board over the settlement of claims was made more complete than ever before. Not only did the new board continue to act as a board of review but the entire machinery established for the investigation and negotiation of claims, including the cancellation section of the supply and sales division, was placed directly under the control of the Construction Claims Board. Five district adjusters were appointed to take over the organization and duties of the former district cancellations, claims, and contracts board. The work formerly carried on by the several cancellation sections of the Supply and Sales Division was also taken over by the district adjusters, so that their jurisdiction extends to claims arising out of the suspension and cancellation of all purchase orders and contracts of the Emergency Fleet Corporation and those of its prime contractors. The district adjusters were made responsible solely to the construction claims board for the progress of all cancellation work in their respective districts. To still further concentrate the line of authority, the Construction Claims Board was removed from the jurisdiction of the vice president and ordered to report direct to the President of the Emergency Fleet Corporation.

The newly established districts of the construction claims board were the same as those of the former district cancellations, claims, and contracts boards, with the exception of the eastern district, which comprised both the Middle Atlantic and Delaware River districts of the former Construction Division as then organized.

Of the 532 contracts awarded by the Corporation for the construction of vessels of all kinds, 188 contracts, involving 906 vessels, were affected by cancellation. The construction of 17 requisitioned ves-

sels under five private contracts was also suspended, making a total of 193 ship cancellation claims involving 923 vessels and hulls.

On June 30, 1920, complete and final settlement had been effected in 83 of these claims. Eighty-two of these settlements represented Emergency Fleet Corporation ship contracts, while the remaining settlement covered a requisitioned hull, leaving 110 ship-cancellation claims in the course of settlement at the close of the year.

Of this latter number, agreements have been concluded with 31 contractors (27 Emergency Fleet Corporation contractors and 4 requisitioned contracts) for the settlement of the commitments involved in their claims. The settlement of the commitments, either by the contractor or the Emergency Fleet Corporation, in 22 of the outstanding claims is governed by the provision of the original contracts.

In addition to the 193 ship-cancellation claims already mentioned, approximately 7,000 claims of various kinds have so far resulted from the cancellation of the original ship contracts. A large proportion of these claims are subcontractors' claims, which have arisen from the obligations of the shipbuilders and other contractors that have been assumed by the Emergency Fleet Corporation in connection with the cancellation settlements. Since claims of this character are dependent upon the conclusion of an adjustment agreement with the prime contractors, it will readily be seen that the number of claims remaining to be settled can not be definitely stated until adjustments have been reached with all of the prime contractors governing the settlement of their commitments.

The total number of claims of all kinds as of June 30, 1920, was 7,160. Of this number 3,834 were settled and 1,576 were withdrawn and became void for various causes, leaving 1,750 claims unsettled at the close of the fiscal year. The status of the settled claims is based upon the execution of an adjustment agreement and not upon the action of the Construction Claims Board.

The following is a summary of the number and general character of the active and settled claims:

Nature of claims.	Settled.	With- drawn and void.	Active.	Total.
(A) Prime ship contractors.....	123	48	142	313
(B) Emergency Fleet Corporation purchase orders and contracts.....	1,506	133	265	1,904
(C) Subcontractors.....	2,174	1,378	1,341	4,893
(D) Miscellaneous.....	31	17	2	50
Total.....	3,834	1,576	1,750	7,160

The claims shown above as withdrawn and void represent claims that were entered on the records as claims and were subsequently withdrawn by the claimant, or cases which upon investigation proved not to possess any basis for a claim. This classification also includes claims that were sent to other districts and divisions for investigation and completion. Settlement of the 3,834 claims shown in the foregoing summary was effected as follows:

Manner of settlement.	Number of claims.
With cost.....	1,622
Without cost.....	1,329
Reinstated.....	549
Disallowed.....	335
Total.....	3,835

It will be observed from the foregoing statement that of the 3,835 settled claims, 1,622 were settled "with cost." These are claims involving a monetary consideration and represent those with which the board has been more directly concerned. So-called settlements "without cost" were effected by the district adjusters under rules prescribed from time to time by the Construction Claims Board. It may be stated, by way of explanation, that the settlement of a claim by reinstatement resulted from the withdrawal or annulment by the Corporation of the cancellation order, thus restoring or reinstating the canceled purchase order or contract to its status prior to cancellation. Such reinstatements were only made, however, when the completion of an order for subsequent sale was more economical than its cancellation, or where the material and equipment covered by an order could be used by the Emergency Fleet Corporation for replacement purposes.

Every effort is being made by the Construction Claims Board and its district organizations to complete the settlement of all claims as rapidly as is consistent with the best interests of the Government.

#### LEGAL DIVISION, EMERGENCY FLEET CORPORATION.

The service rendered to the Emergency Fleet Corporation by its Legal Division during the year ending June 30, 1920, may be divided under two heads.

- (1) Liquidating liabilities arising out of cancellation of construction activities, and
- (2) Acting in an advisory capacity and negotiating contracts required by the various departments.

The close relationship between the legal division and the cancellation board brought about the coordination of the work of the



general counsel and the chairman of the Board in December, 1919. A number of attorneys were assigned to the construction claims board for district work.

Actual litigation at first comprised a small part of the work of the Legal Division, but with the increased number of cancellations the volume of litigation has steadily increased. In the handling of these cases, the attorneys of the Fleet Corporation act in conjunction with the United States district attorneys under the Executive order of May 31, 1918, which definitely charged the Attorney General with the duty of conducting the litigation of the Emergency Fleet Corporation. The actual preparation of the cases and often the trial itself depends upon the facts within the peculiar knowledge of the Fleet Corporation attorneys, and it has therefore been necessary to increase the personnel of the litigation section.

It may be stated that the correct and careful supervision of litigation and full support and assistance of the construction claims board represent the most important functions of the legal division. These problems are of paramount importance in the work of finally disposing of the difficulties which have arisen on account of the retrenchment and cancellation of the construction activities, which the Fleet Corporation was created to promote.

#### DEPARTMENT OF INVESTIGATION.

The plant protection section of the Emergency Fleet Corporation was on January 12, 1920, redesignated as the Department of Investigation. This report covers the activities of the plant protection section from July 1, 1919, to January 12, 1920; from January 13 to June 30, 1920, the activities of the Department of Investigation.

##### Plant-Guarding and Fire-Protection Branch.

The policy of the reduction of guard forces was in practice since the signing of the armistice, and at the time the plant protection section was discontinued the guard organization had been reduced from 7,000 to 3,595 men. Due to the efficient surveillance of the guard force, no serious disturbances occurred in the shipyards and arrests were made for minor offenses only.

During a period of eight months prior to the abolishment of the fire-protection branch 65 fires were reported in the shipyards, causing a total loss of \$155,500.

On October 1, 1919, the home office supervision of the fire protection and guarding activities was discontinued and that supervision transferred to the offices of the district managers. This action confined the duties of the plant-protection section to the direction of investigation and intelligence activities.

**Department of Investigation.**

The activities of the Department of Investigation from its organization in April, 1918, to June 30, 1920, have embraced approximately 2,500 separate investigations, scattered over every district in the country from the Atlantic to the Pacific and from the Great Lakes to the Gulf of Mexico.

This department was only responsible for the investigation work of the Construction Division of the United States Shipping Board Emergency Fleet Corporation until January 13, 1920, at which time the responsibilities of the department were increased by assigning investigation work of the Division of Operations, although cases for the Division of Operations were handled before such assignment.

These investigations included matters within the jurisdiction of the Division of Construction, also a large number of cases undertaken at the request of the Division of Operations. Considerable work was also done in inquiring into the activities of the division of reconstruction in the Great Lakes district.

The department's operations have also been coordinated with those of the Bureau of Investigation of the Department of Justice, the Office of Naval Intelligence, the Military Intelligence Section, and other agencies of the Government in which there was joint interest.

**REPORT OF THE GENERAL COMPTROLLER.**

The duties of the General Comptroller of the United States Shipping Board Emergency Fleet Corporation were defined by an amendment to the by-laws of the Corporation on October 29, 1919. A general comptroller was appointed in September, 1919; thus for the first time the responsibility for the control, audit, and general accounting policy of the entire Corporation was placed under one executive.

Gratifying progress has been made in the organization of the department and the establishment of the financial control policy.

The following is a brief summary of the accomplishments during the year:

(1) The reorganization of the finance division of the Division of Construction and its removal from Philadelphia to Washington. A reduction in personnel through consolidation of districts on account of decrease of construction program.

(2) Setting up of control accounts through which closer coordination of accounting procedure between divisions of the corporation has been secured.

(3) Reorganization of method of handling contractor's claims for the purpose of obtaining more prompt settlement.

(4) Obtaining from operators of Shipping Board vessels through organized effort approximately \$110,000,000 in cash and 4,500 voyage accountings, together with vessel itineraries that had not been previously submitted.

(5) Securing closer control over operator's accounts by installation of separate accounting system for United States Shipping Board vessels.

(6) Securing current (estimated) statements of vessel operations immediately after the completion of the voyages.

(7) Reorganization of financial control of housing division relative to operation and sale of housing properties.

A more detailed report on the activities of the comptroller's organization relating to the various divisions follows:

**Construction Division, General Comptroller's Department.**

The financial and accounting control of this division was originally organized under a separate and distinct department functioning independent of the other divisions of the Corporation, but during the past fiscal year it has been brought under the general comptroller's organization.

The chief problems of this division receiving attention at the present time are:

- (1) Continuation of accounts relating to construction work not yet completed.
- (2) Audit or reaudit of contractors' accounts before settlement can be made.
- (3) Audit of contractors' claims for wage reimbursement, changes, and extras, and claims due to cancellations.
- (4) Audit of inventory accounts with physical inventories of current, surplus, and salvage materials.
- (5) Determination of construction costs as nearly as possible by hulls.

**Operating Division, General Comptroller's Department.**

During the past fiscal year considerable progress has been made in bringing the accounts up to date and securing current control over the accounts of operators of Shipping Board vessels.

**Housing Division.**

Just prior to the close of the current fiscal year a reorganization of the Housing Division was effected, whereby the construction of the various projects was declared to be completed and the accounts converted to an operating basis, with the intent of showing the operating revenues, disbursements, and sales of each project separately. The necessity for careful financial control will be realized, as there are approximately 10,000 dwellings, houses, hotels, dormitories, as well as other plants and properties accessory to small municipalities, located at various points about the country, some of which are being rented, others sold outright, and/or on a deferred-payment plan.

**Financial Forecast.**

The expenditures of the Corporation heretofore have been paid out of appropriations made to the United States Shipping Board and/or Emergency Fleet Corporation, as follows:

Permanent fund for purchase of capital stock of Emergency Fleet Corporation .....	\$50,000,000.00
Emergency shipping fund.....	3,203,201,000.00
Salaries and expenses, appropriations 1917 to 1920.....	2,212,024.38
	3,255,413,024.38
Total appropriations .....	3,255,413,024.38

In addition to these appropriations, there were allotments made from the national security and defense fund for 1918 and 1919 totaling \$29,512,426.27, making total appropriations and allotments of \$3,284,925,450.65.

However, under the sundry civil appropriation act for the fiscal year ended June 30, 1920, the unexpended balances of the emergency shipping fund were reappropriated for construction or other purposes. Also, under the merchant marine act of June 5, 1920, the Board is instructed to return to the United States Treasury, to the credit of the Board, to be reexpended for the construction, requisitioning, or purchasing of vessels the net proceeds derived by the Board prior to July 1, 1920, from any activities. It will be noted on the exhibits and schedules in the appendix of this report that the available cash funds and appropriations are being rapidly exhausted. This is due largely to the fact that the present exchange situation with foreign countries has resulted in a decided falling off of operating revenues and a consequent decrease in the selling program, and in order to meet competition freight is being carried collect.

NOTE.—*Accounts receivable (consolidated balance sheet, item No. 2).*—The amount due from War Department (see appendix, Part IV, schedule 2, item A), amounting to \$37,800,352.30, will be increased by the other amounts disbursed by the Fleet Corporation for the account of the War Department. Briefly summarized, the amounts due by the War Department, but at the date of the statement not transferred to accounts receivable, and which bring the amount due by the War Department up to \$208,243,795.72, are as follows:

Charter hire, restricted period fiscal year 1918-19.....	\$63, 994, 833. 61
Charter hire prior and subsequent to fiscal year, based on estimated rate .....	24, 636, 047. 02
Unaudited voyage accounts, billed, unbilled, billed suspense, and miscellaneous.....	16, 839, 172. 40
Items appearing within schedule 5, and estimates in connection therewith, etc.....	60, 912, 450. 31
Items appearing as a reduction on schedule 8.....	3, 860, 000. 00
Other items .....	200, 940. 08
	<hr/>
	170, 443, 443. 42

## REPORT OF THE TREASURER.

During the past year the office of the treasurer has been divided into—

- (1) Home office,
- (2) Field service.

**Home Office.**

The home office is composed of the following departments:

- (1) Office of assistant treasurer.
- (2) Treasury audit department.
- (3) Collection bureau.
- (4) Trust department.

*Office of assistant treasurer.*—The assistant treasurer's office pays all accounts rendered against the Corporation upon duly authorized and approved vouchers.

*Treasury audit department.*—The treasury audit department was organized in September, 1918, for the purpose of transmitting monthly statements of money accounts to the United States Treasury Department, as required by the act of July 1, 1918, and regulations promulgated by the Secretary of the Treasury under date of August 29, 1918.

Regulations are issued by this department relative to the preparation of vouchers and rendering monthly statements of accounts to bring them into conformity with the requirements of the regulations issued by the Secretary of the Treasury.

*Collection bureau.*—The functions of the collection bureau are as follows:

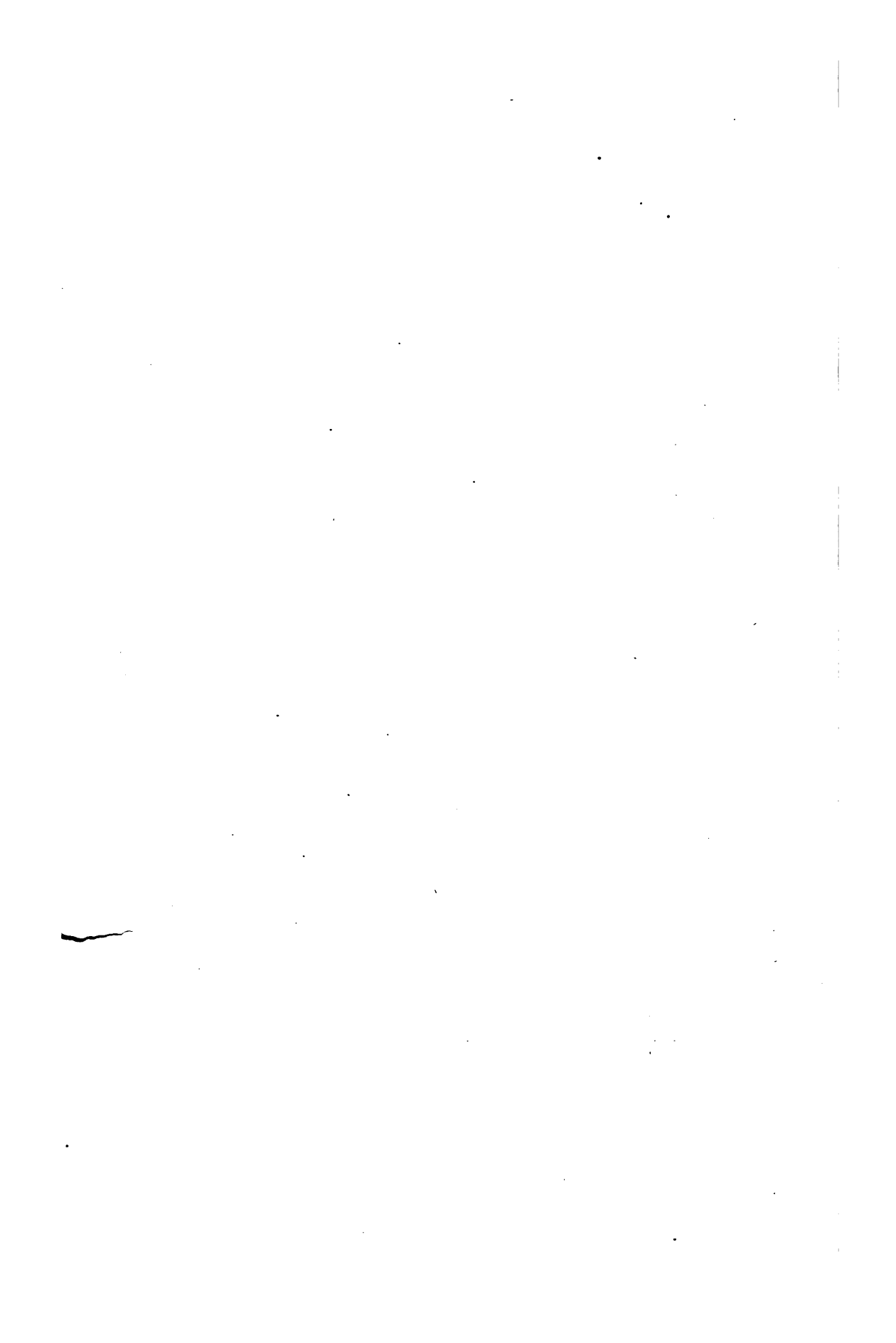
First. To secure prompt payment of all due invoices issued by the home office.

Second. To follow up and check the collections effected by the several district disbursing officers who will submit monthly reports to the collection bureau in regard to collections received and due accounts outstanding.

Third. To take whatever steps may be found necessary to secure the liquidation of all unpaid accounts.

*Trust department.*—The trust department is charged with the custody and safeguarding of all valuables and securities of the Corporation.

Statements of receipts and disbursements are found in the appendix, Part IV.



## APPENDIX.

### I. UNITED STATES SHIPPING BOARD.

	Page.
TABLE I. (a) Names and compensation of employees of the United States Shipping Board in service for some period within the year ending June 30, 1920, who have resigned prior to that date.....	188
(b) Names and compensation of employees of the United States Shipping Board in service on June 30, 1920.....	190
II.      Laws from 1914 to date affecting the Shipping Board.....	193
III. (a) Statement of accidents and estimated amounts and losses from July 1 to December 1, 1919.....	196
(b) Statement of accidents and estimated amounts and losses from January 1 to June 30, 1920.....	197

### II. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF CONSTRUCTION AND REPAIRS.

TABLE I. Shipyards now building for the Corporation.....	199
II. Shipyards disposed of or transferred to supply and sales division....	200
III. Marine railway and dry-dock contracts.....	201
IV. Keels laid, by months, from beginning of program.....	204
V. Ships launched, by months, from beginning of program.....	208
VI. Ships delivered, by months, from beginning of program.....	210
VII. Ships delivered, by districts.....	211
VIII. Ships delivered, by States.....	212
IX. Active program, by type of ship.....	216
X. Active program, by class of construction.....	216
XI. Accumulated program of ship construction (including construction in foreign yards).....	217
XII. Accumulated program of ship construction, by geographical sections of the United States.....	218
XIII. Estimated deliveries, by months, to complete the program.....	219
XIV. Shipyards which have completed contracts.....	220
XV. Cancellations of ship contracts, by type of ship and districts.....	222
XVI. Cancellations of ship contracts, by States.....	224
XVII. Passenger ships, status of contracts.....	227
XVIII. Dormitories and cafeterias constructed or planned for the Corporation.....	228
XIX. Schedule of housing projects and type of housing.....	228
XX. Loans made to public-utility companies.....	229
XXI. Municipalities which have furnished facilities for housing.....	230
XXII. Total commitments, housing program.....	230
XXIII. Details of housing expenditures.....	231
XXIV. Security held by the Corporation for expenditures on account of passenger transportation.....	235
XXV. Contracts for transportation facilities.....	237
XXVI. Data on ex-enemy vessels.....	239

III. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, DIVISION OF OPERATIONS.		Page.
TABLE I. Vessels entering and clearing United States ports with cargo, January 1, 1920, to June 30, 1920.....		250
II. United States Shipping Board steel cargo vessels employed in foreign trade.....		252
III. Employment of United States Shipping Board tonnage, March, 1919, to June 30, 1920.....		253
IV. Direct service lines to South and Central America.....		254
V. Vessels operating in trades which do not have United States ports as terminals.....		256
VI. Assignment of United States Shipping Board tonnage.....		257
IV. UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, MISCELLANEOUS SECTION.		
EXHIBIT A. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Consolidated balance sheet" as at June 30, 1920.....		260
B. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement to show outcome of all transactions, by classes of activities, from inception to June 30, 1920," as at June 30, 1920.....		261
Schedule 1. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of general cash and cash funds" as at June 30, 1920.....		264
2. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of accounts receivable" as at June 30, 1920.....		264
3. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of investments" as at June 30, 1920.....		265
4. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of materials, supplies, ship stores, etc." as at June 30, 1920.....		265
5. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of purchase, construction, and reconditioning expenditures on owned vessels" as at June 30, 1920.....		266
6. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of plants, property, and equipment, fuel-oil stations, real estate, and buildings, furniture and fixtures, mechanical office equipment, automobiles, launches, etc.," as at June 30, 1920..		266
7. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of construction of improvements, to, etc., expenditures of housing projects, and transportation facilities" as at June 30, 1920..		266
8. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of appropriations, allotments, and unexpended balances thereon less transfers therefrom to show net amount received from appropriations and allotments" as at June 30, 1920.....		267



EXHIBIT A—Continued.

	Page.
Schedule 9. United States Shipping Board and United States Shipping Board Emergency Fleet Corporation "Statement of reserves" as at June 30, 1920.....	267
EXHIBIT C. Statement of receipts and withdrawals from appropriation and allotment accounts in the United States Treasury for fiscal year ended June 30, 1920.....	269
D. Cash receipts and disbursements for the fiscal year ended June 30, 1920.....	270
Schedule 10. Disbursing officer, miscellaneous receipts, July 1, 1919, to June 30, 1920.....	272
11. Division of Construction, miscellaneous cash receipts, July 1, 1919, to June 30, 1920.....	272
12. Division of Operations, summary of cash receipts, July 1, 1919, to June 30, 1920.....	272
13. Disbursing officer, miscellaneous disbursements, July 1, 1919, to June 30, 1920.....	273
14. Division of Construction, miscellaneous cash disbursements, July 1, 1919, to June 30, 1920.....	273
15. Division of Operations, summary of cash disbursements, July 1, 1919, to June 30, 1920.....	273

PART I.—UNITED STATES SHIPPING BOARD.

TABLE I (a).—Names and compensation of employees of the United States Shipping Board in service for some period within the year ending June 30, 1920, who have resigned prior to that date.

Name.	Designation.	Legal residence.	Rate per annum.
Edwin H. Abbott.....	Assistant counsel.....	Washington, D. C.....	\$5,800
Harold V. Amlerg.....	Special expert.....	Illinois.....	7,500
C. E. Andrews.....	do.....	Washington, D. C.....	3,000
Malcolm J. Annadale.....	Clerk.....	do.....	1,200
Harriet W. Bangs.....	Typist.....	do.....	1,200
Edward D. Barnes.....	Elevator operator.....	do.....	840
Helen Barnes.....	Messenger girl.....	do.....	540
Ralph H. Blanchard.....	Special expert.....	Maryland.....	3,600
G. B. Bloomfield.....	Clerk.....	Indiana.....	1,200
Donna P. Bonner.....	Draftsman.....	Washington, D. C.....	1,440
Charles W. G. Brett.....	Senior clerk.....	New Hampshire.....	2,500
Charles S. Brock.....	do.....	Florida.....	2,400
Eleanor L. Brown.....	Messenger girl.....	Washington, D. C.....	540
George T. Brown.....	Special expert.....	Connecticut.....	3,200
Raymond H. Brown.....	Stenographer.....	Washington, D. C.....	1,400
Aura Burckham.....	Clerk.....	Tennessee.....	1,440
James M. Burnley.....	do.....	Virginia.....	1,200
Ira A. Campbell.....	Admiralty counsel.....	New York.....	1
Edward Carter.....	Watchman.....	Washington, D. C.....	800
Mary Cantu.....	Statistical clerk.....	Arizona.....	1,320
Elizabeth Chamberlain.....	Clerk.....	Mississippi.....	1,320
Lloyd Chase.....	Unskilled laborer.....	New York.....	840
Joseph H. Claffey.....	Assistant examiner.....	New Jersey.....	1,800
Lincoln R. Clark.....	Assistant counsel.....	Missouri.....	6,000
Mary M. Clark.....	Statistical clerk.....	Washington, D. C.....	1,320
Ellert Clarke.....	Special expert.....	New York.....	6,000
James H. Collins.....	Examiner.....	do.....	5,000
William H. Connolly.....	Special expert.....	Massachusetts.....	2,400
M. M. Connors.....	Stenographer.....	do.....	1,440
James V. Connerse.....	Examiner.....	New York.....	1,200
Daniel Couhlin.....	Watchman.....	Washington, D. C.....	800
Edmund K. Crittenden.....	Special expert.....	California.....	3,300
Mabel Croft.....	Typist.....	Washington, D. C.....	1,600
Bramwell Davis.....	Special expert.....	New York.....	3,000
Helen Davis.....	Stenographer.....	do.....	1,640
Helen E. Davis.....	Clerk.....	South Dakota.....	1,400
Miles M. Dawson.....	Special examiner.....	New York.....	3,750
Edmund E. Day.....	Special expert.....	Massachusetts.....	7,700
Christopher Dixon.....	Elevator operator.....	Washington, D. C.....	840
F. C. Dolcater.....	Special expert.....	Ohio.....	3,250
Erroll Dunbar.....	Draftsman.....	Washington, D. C.....	1,200
Carson S. Driscoll.....	Special expert.....	Illinois.....	4,500
L. R. Edminster.....	do.....	do.....	2,400
M. E. England.....	Clerk.....	Washington, D. C.....	1,320
Dora Everts.....	Special expert.....	Massachusetts.....	1,600
Vivia S. Farlin.....	Statistical clerk.....	Washington, D. C.....	1,320
Mary W. Ferebee.....	do.....	North Carolina.....	1,320
V. C. Finch.....	Special expert.....	Wisconsin.....	4,500
Rebekah Fleming.....	Senior typist.....	Tennessee.....	1,320
James H. Fletcher.....	Messenger.....	Virginia.....	600
E. A. Follen.....	Statistical clerk.....	Iowa.....	1,320
Mary G. Fort.....	Typist.....	North Carolina.....	1,080
Elvidge Fortier.....	Clerk.....	Louisiana.....	1,100
D. E. Francis.....	do.....	Washington, D. C.....	1,320
Susie J. Frazier.....	Statistical clerk.....	Maryland.....	1,200
Adreon Futterer.....	Special expert.....	do.....	2,700
Mrs. F. G. Garrett.....	Statistical clerk.....	Washington, D. C.....	1,320
Carrie B. Geise.....	do.....	Nebraska.....	1,200
M. M. Gillespie.....	do.....	Ohio.....	1,320
Mary H. Gleason.....	Clerk.....	Massachusetts.....	1,500
Jay Goux.....	do.....	New York.....	1,500
Joseph A. Granahan.....	do.....	do.....	1,440
Eugene S. Gregg.....	Special expert.....	Pennsylvania.....	4,500
C. E. Griffin.....	do.....	Texas.....	3,600
Glenn F. Griffin.....	do.....	Michigan.....	2,400
John W. Griffin.....	Admiralty attorney.....	Illinois.....	2,400
		New York.....	7,200

TABLE I (a).—Names and compensation of employees of the United States Shipping Board in service for some period within the year ending June 30, 1920, who have resigned prior to that date—Continued.

Name.	Designation.	Legal residence.	Rate per annum.
Catherine Hannan.....	Typewriter.....	Washington, D. C.....	\$1,080
Jennie Hansen.....	Clerk.....	South Dakota.....	1,100
William B. Hardy.....	Typist.....	Washington, D. C.....	1,080
John Harrison.....	Unskilled laborer.....	Louisiana.....	600
John D. Harrison.....	Special expert.....	Pennsylvania.....	1,800
Bertha V. Harry.....	Charwoman.....	Washington, D. C.....	330
Minnie A. Hartigan.....	Typist.....	do.....	1,080
W. V. Hatton.....	Clerk.....	Alabama.....	1,320
H. K. Herwitz.....	Special expert.....	Illinois.....	3,000
Adele Heister.....	Statistical clerk.....	Pennsylvania.....	1,320
L. M. Hilderbrand.....	Stenographer.....	Maryland.....	1,440
Bonnie L. Hockinsmith.....	Clerk.....	Kentucky.....	1,320
D. J. Howard.....	do.....	do.....	1,200
William H. Hull.....	Special expert.....	Connecticut.....	600
William I. Hummer.....	Stenographer.....	Pennsylvania.....	1,320
Edward N. Hurley.....	Chairman.....	Illinois.....	7,500
James E. Hurley.....	Unskilled laborer.....	Washington, D. C.....	780
Karl E. Hurlburt.....	Confidential clerk.....	Connecticut.....	3,200
Mark Hyman.....	General counsel.....	New York.....	10,000
Florence Johns.....	Schedule clerk.....	Indiana.....	1,320
Dorothy Johnson.....	Typist.....	Wisconsin.....	1,200
Edna Johnston.....	Clerk.....	Ohio.....	1,320
Isabelle M. Jones.....	Chief telephone operator.....	New York.....	1,680
Emily E. Jones.....	Stenographer.....	Washington, D. C.....	1,200
Charles L. Kaufman.....	Special expert.....	Ohio.....	3,600
Mary C. King.....	Examiner.....	Washington, D. C.....	1,200
Amelia Korn.....	Stenographer.....	do.....	1,400
Durant F. Ladd.....	Special agent.....	Massachusetts.....	2,500
Kathleen Lawler.....	Clerk to commissioner.....	Michigan.....	3,200
Mildred Leary.....	Stenographer.....	Iowa.....	1,440
Clarence H. Lee.....	Unskilled laborer.....	Washington, D. C.....	840
Ruth E. Lee.....	Clerk.....	Florida.....	1,100
Mary F. Lerch.....	Statistical clerk.....	Washington, D. C.....	1,100
Frank B. Lord.....	Special expert.....	do.....	6,000
F. M. Luber.....	Typewriter.....	do.....	1,100
R. R. Lutz.....	Special expert.....	do.....	5,000
Effe L. McCausland.....	Stenographer.....	California.....	1,200
Ada F. McKnight.....	Clerk.....	Michigan.....	1,440
H. R. McSayles.....	Messenger.....	Texas.....	840
Harry E. Mack.....	Statistical clerk.....	New York.....	1,320
Pauline S. Mack.....	do.....	Massachusetts.....	1,200
Celia Marks.....	Stenographer.....	District of Columbia.....	1,200
Lloyd S. Maxwell.....	Special expert.....	New York.....	2,400
Lewis Meriam.....	do.....	Maryland.....	5,000
Richard S. Meriam.....	do.....	Massachusetts.....	2,700
Martha Mitchell.....	Charwoman.....	Washington, D. C.....	780
Arthur E. Mittnacht.....	Examiner.....	Maryland.....	5,000
Fred D. Mohler.....	Messenger.....	Washington, D. C.....	720
Thomas M. Monroe.....	Clerk.....	do.....	1,200
M. H. Montrose.....	do.....	Pennsylvania.....	1,320
Virginia Moran.....	Charwoman.....	Washington, D. C.....	330
Minnie Munk.....	Stenographer.....	Michigan.....	1,500
James W. Munn.....	Special expert.....	do.....	6,000
Ida B. Nichols.....	Statistical clerk.....	Maryland.....	1,320
Carl A. Nolan.....	Stenographer.....	Washington, D. C.....	1,400
James J. Noonan.....	Mimeograph operator.....	do.....	1,080
Mary H. Norton.....	Coder.....	Iowa.....	1,200
Mrs. Cecil E. Nussbaum.....	Statistical clerk.....	Illinois.....	1,320
Clara Oppen.....	do.....	Wisconsin.....	1,320
Florence G. Palmer.....	Stenographer.....	Washington, D. C.....	1,320
Andrew Petterson.....	Unskilled laborer.....	do.....	600
Bessie Mary Paul.....	Typist.....	do.....	1,080
Isabelle Payne.....	Senior typist.....	do.....	1,200
John Barton Payne.....	Chairman.....	Illinois.....	7,500
Elmer Pendell.....	Assistant examiner.....	do.....	1,800
Harris G. Pett.....	Special expert.....	Wisconsin.....	3,500
Richard L. Plummer.....	Messenger.....	Virginia.....	840
John C. Poindexter.....	Unskilled laborer.....	Washington, D. C.....	840
J. G. Randall.....	Special expert.....	Virginia.....	3,600
Janet E. Rane.....	do.....	Massachusetts.....	1,500
May M. Reed.....	Senior clerk.....	Arkansas.....	2,400
R. G. Richards.....	Examiner.....	Massachusetts.....	3,000
Wallace A. Richards.....	Unskilled laborer.....	Washington, D. C.....	840
H. M. Robinson.....	Commissioner.....	California.....	7,500
F. A. Roman.....	Clerk.....	Washington, D. C.....	1,720
George Roorbach.....	Special expert.....	do.....	4,200
F. A. Roper.....	do.....	New York.....	3,600
A. F. Rupp.....	Catalogue and index clerk.....	do.....	1,740

190 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE I (a).—Names and compensation of employees of the United States Shipping Board in service for some period within the year ending June 30, 1920, who have resigned prior to that date—Continued.

Name.	Designation.	Legal residence.	Rate per annum.
Charlotte Ryan.....	Library assistant.....	Texas.....	\$1,320
J. A. Scannell.....	Chief clerk.....	Massachusetts.....	3,000
Gertrude Scherkenbach.....	Statistical clerk.....	Minnesota.....	1,320
B. H. Schockel.....	Special expert.....	Indiana.....	3,600
Morris S. Schwartz.....	Stenographer.....	North Carolina.....	1,500
Donald Scott.....	Assistant to vice chairman.....	New York.....	6,000
Robert A. Scott.....	Examiner.....	New Jersey.....	1,500
Thomas A. Scott.....	Commissioner.....	Connecticut.....	7,500
W. O. Scroggs.....	Special expert.....	Louisiana.....	3,900
Isidor Shaffer.....	Confidential clerk.....	Massachusetts.....	2,100
Mrs. Mabel E. Shears.....	Senior stenographer.....	Nebraska.....	1,320
Olive M. Shields.....	Clerk.....	California.....	1,320
Anna B. Sloans.....	Clerk, qualified in modern languages.....	Washington, D. C.....	1,500
Charles F. Smith.....	Special expert.....	Virginia.....	2,400
Lora Smith.....	Charwoman.....	Washington, D. C.....	330
B. C. Stern.....	Special expert.....	New York.....	2,700
F. H. Sterns.....	do.....	Massachusetts.....	2,700
Aubrey Suitt.....	Senior typist.....	Washington, D. C.....	1,200
Thomas R. Taylor.....	Special expert.....	.....	3,000
Edna Thomas.....	Senior stenographer.....	Oklahoma.....	1,440
Elizabeth B. Thomas.....	Charwoman.....	Washington, D. C.....	330
Oran M. Thompson.....	Messenger.....	do.....	840
Margaret L. Tucker.....	Typist.....	do.....	1,200
Hamilton Vreeland, jr.....	Attorney.....	.....	3,000
E. V. Walters.....	Messenger.....	Maryland.....	600
William C. Ward.....	Assistant to chairman.....	New York.....	5,000
Clara Waters.....	Statistical clerk.....	Washington, D. C.....	1,320
David M. Watkins.....	Examiner.....	Pennsylvania.....	2,600
Helen W. Watkins.....	Clerk.....	Maryland.....	1,440
William T. Wayson.....	Watchman.....	Washington, D. C.....	800
Marian E. Weaver.....	Stenographer.....	Pennsylvania.....	1,800
Bessie C. Weekley.....	Charwoman.....	Washington, D. C.....	420
A. H. Williams.....	Special expert.....	.....	3,000
George D. Williams.....	Elevator operator.....	Washington, D. C.....	840
Esther Wilson.....	Typewriter.....	Florida.....	1,200
Elsie Woersdorfer.....	Senior stenographer.....	Indiana.....	1,560
Anna M. Wolf.....	do.....	Washington, D. C.....	1,440
Katherine E. Wood.....	do.....	Ohio.....	1,800

TABLE I (b).—Compensation of employees of United States Shipping Board in service on June 30, 1920.

Name.	Designation.	Legal residence.	Rate per annum.
W. R. Alexander.....	Attorney.....	Missouri.....	\$3,900
Adolph Amende.....	Senior clerk.....	Alabama.....	2,700
Richard H. Bailey, jr.....	Assistant to chairman.....	Washington, D. C.....	4,800
Mrs. Emma S. Baird.....	Clerk.....	Wisconsin.....	1,560
Albert Barnes.....	Laborer.....	Washington, D. C.....	840
Edward J. Barnes.....	Assistant clerk.....	do.....	960
Loretta B. Barrett.....	Stenographer.....	Missouri.....	1,560
Nellie D. Bath.....	Senior typist.....	Mississippi.....	1,320
Mrs. Lelia R. Bean.....	Stenographer.....	Washington, D. C.....	1,320
John A. Beck.....	Assistant counsel.....	do.....	5,000
Alfred H. Bennett, jr.....	Mimeograph operator.....	New York.....	1,080
W. S. Benson.....	Chairman.....	.....	7,500
Elsie M. Blackman.....	Senior typist.....	New Jersey.....	1,320
Joseph A. Bourke.....	Elevator operator.....	Washington, D. C.....	840
Robert L. Boyd.....	Laborer.....	do.....	840
Mrs. Marian R. Bretzer.....	Stenographer.....	Maryland.....	1,440
Valentine G. Bretzer.....	Chief, files division.....	New York.....	2,700
John T. Brooks.....	Laborer.....	Washington, D. C.....	840
Robert Brooks.....	do.....	do.....	780
Edith V. Brown.....	Senior typist.....	do.....	1,200
Percy Brown.....	Laborer.....	do.....	840
Adella J. Burdine.....	Clerk.....	do.....	1,440
Anne Callaghan.....	Stenographer.....	Ohio.....	1,320
Mabel J. Carragher.....	Clerk.....	Massachusetts.....	1,200
Benjamin Carter.....	Laborer.....	Washington, D. C.....	840
Joseph Carter.....	do.....	do.....	840
Walter F. Carter.....	Watchman.....	do.....	900

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 191

TABLE I (b).—*Compensation of employees of United States Shipping Board in service on June 30, 1920—Continued.*

Name.	Designation.	Legal residence.	Rate per annum.
Walter B. Castonguay	Senior clerk	Connecticut	\$2,040
Katherine A. Cissell	Senior typist	Washington, D. C.	1,320
Mildred E. Coe	do	do	1,200
Frederic Conger	Attorney	New York	3,900
Harry E. Cook	Typewriter repair man	do	1,440
John E. Cook	Elevator operator	Washington, D. C.	360
Mrs. R. W. Cooper	Clerk	do	1,320
Mrs. Nanna G. Cross	Stenographer	do	1,440
Blanche M. Curry	do	do	1,440
Albert D. Davis	Cabinetmaker	Virginia	1,800
Laura M. Davis	Stenographer	Washington, D. C.	1,560
Mrs. Mary E. Davis	Charwoman	do	420
Mrs. Maude S. Dawson	Clerk	Nebraska	1,440
Robert A. Dean	General counsel	Massachusetts	10,000
T. Henry Deckelman	File clerk	Maryland	1,440
Ernest M. Dew	Senior clerk	do	1,840
David E. Diggs	Elevator operator	Washington, D. C.	360
John A. Donald	Commissioner	New York	7,500
George E. Dowden	File clerk	New Jersey	1,440
Charles F. Dutch	General solicitor	Washington, D. C.	10,000
Thomas A. Fells	Laborer	do	840
Daniel W. Fskridge	do	do	1,020
Ruth N. Feller	Stenographer	Indiana	1,680
Henry Fantroy	Laborer	Washington, D. C.	840
William R. Fitch	Attorney	do	3,900
John J. Flaherty	Secretary	New York	5,000
Caroline D. Flanner	Senior clerk	Washington, D. C.	2,160
Frederick H. Flinn	do	New Jersey	2,280
Frederic Gellinger	Chief of division	West Virginia	2,700
Winston Ghan	Elevator operator	Washington, D. C.	840
Leon S. Gibson	Senior clerk	Maryland	2,160
Martin J. Gillan	Special expert	Wisconsin	7,500
Thomas Godfrey	Watchman	Washington, D. C.	900
Morris Goldberg	Clerk	do	1,320
William H. Graham	Laborer	do	840
Charles B. Gray	Senior clerk	Pennsylvania	1,980
James Green	Laborer	Maryland	840
Mabel E. Hadley	Senior typist	Ohio	1,200
Vance V. Hallman, jr.	Tariff clerk	North Carolina	1,680
Edna Hancock	Stenographer	Washington, D. C.	1,680
Lillian Harris	Telephone operator	do	1,080
Rilla M. Hauke	Librarian	do	1,800
Malcolm Hay	Chief clerk	Virginia	3,300
Marion Hill	Senior typist	Washington, D. C.	1,440
Nettie J. Hipple	Stenographer	Pennsylvania	1,680
Mrs. Lizzie Hitner	Charwoman	Washington, D. C.	420
Josephine B. Hollingsworth	Assistant librarian	California	1,440
Thomas C. Homiller	Messenger	Maryland	810
Edgar Hopkins	Laborer	Washington, D. C.	840
Charles H. Howell	Accountant	do	2,160
Corral H. Hunt	Attorney	Ohio	3,500
Gertrude Hyman	Senior typist	Washington, D. C.	1,320
Abbie S. Irons	Stenographer	West Virginia	1,560
James Jackson	Porter	Virginia	960
J. Pierson James	Assistant secretary	California	3,200
Margaret Jarvis	Secretary to general solicitor	Wisconsin	1,960
Harold S. Johnson	Senior typist	New York	1,320
Sarah Johnson	Charwoman	Washington, D. C.	420
Mrs. Jennie J. Jones	do	do	420
Olive V. King	Senior typist	do	1,320
Carl P. Kremer	Examiner	Virginia	2,400
Mary Latshaw	Typist	Pennsylvania	1,100
Herman Laue	Examiner	Washington, D. C.	3,000
Edward C. Lawson	Watchman	do	900
Leon A. Le Buffet	Clerk	South Carolina	1,680
Robert Le Fevre	Chief of office	Ohio	2,400
Norman A. Levey	Messenger	Washington, D. C.	720
Frederick Lightfoot	Laborer	do	840
Bonnie L. Little	Library assistant	Minnesota	1,440
Annie De S. Lovejoy	Clerk	Washington, D. C.	1,800
Walter McKenney	Laborer	do	840
Sarah L. McQueen	Managing clerk	Maryland	1,800
George Mackey	Laborer	Washington, D. C.	840
Calvert Magruder	Attorney	Maryland	3,500
Bessie C. Mallicote	Clerk	Washington, D. C.	1,560
Henry E. Manghum	Examiner	Oregon	4,000
Julius Manns	Laborer	Washington, D. C.	840
Jerry C. Massey	Attorney	Oklahoma	3,000
James H. Mathlot	Chief draftsman	Maryland	1,860

192 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE I (b).—*Compensation of employees of United States Shipping Board in service on June 30, 1920—Continued.*

Name.	Designation.	Legal residence.	Rate per annum.
Albert M. Mays.....	Laborer.....	Washington, D. C.....	\$780
Allen E. Mechem.....	Senior clerk.....	California.....	1,800
Willis E. Monty.....	Attorney.....	Vermont.....	3,600
Roy H. Morrill.....	Clerk to commissioner.....	Massachusetts.....	3,208
Ruth G. Noll.....	Stenographer.....	Michigan.....	1,560
W. W. Nottingham.....	Assistant counsel.....	Washington, D. C.....	4,500
Charles O'Connell.....	Printing clerk.....	Kentucky.....	2,400
George E. Otterback.....	Watchman.....	Washington, D. C.....	900
Fred B. Pantou.....	Laborer.....	do.....	840
Helen K. Peddinghaus.....	Senior typist.....	Ohio.....	1,200
Lottie Penn.....	do.....	Maryland.....	1,320
William C. Pfeiffer.....	do.....	Washington, D. C.....	1,320
Maurice J. Pierce.....	Accountant.....	Tennessee.....	2,400
Alfred W. Pohlman.....	Assistant clerk.....	Washington, D. C.....	1,200
Leo E. Ranck.....	Clerk.....	Pennsylvania.....	1,320
William Randall.....	Laborer.....	Washington, D. C.....	840
Floyd G. Randolph.....	Elevator operator.....	do.....	480
Harry W. Rausch.....	Clerk.....	Illinois.....	1,800
John G. Reckert.....	do.....	Washington, D. C.....	1,800
Mrs. Katharine C. Renz.....	Telephone operator.....	do.....	1,080
Joseph H. Rhoderick.....	Clerk.....	do.....	1,320
Lloyd R. Roberts.....	Senior clerk.....	Iowa.....	2,160
Serena Robinson.....	Charwoman.....	Washington, D. C.....	420
Constance M. Ryland.....	Clerk.....	Maryland.....	1,320
Paula J. Schlager.....	Stenographer.....	Wisconsin.....	1,680
Geta Scott.....	Laborer.....	Washington, D. C.....	840
Bernice Shanahan.....	Stenotypist.....	Pennsylvania.....	1,440
Rhea C. Shank.....	Telephone supervisor.....	Washington, D. C.....	1,200
George P. Shaw.....	Assistant examiner.....	California.....	2,400
Mrs. Bessie Sheets.....	Senior typist.....	Washington, D. C.....	1,320
Ruth M. Simonds.....	Stenographer.....	New Hampshire.....	1,440
James C. Skelly.....	do.....	New York.....	1,680
E. J. Skidmore.....	Appointment clerk.....	Michigan.....	3,000
Robert L. Smothers.....	Assistant clerk.....	Washington, D. C.....	960
Glen R. Snider.....	Attorney.....	Wisconsin.....	5,000
Marie C. Spahn.....	Senior typist.....	Washington, D. C.....	1,200
Gall Spencer.....	Stenographer.....	Indiana.....	1,440
Christine Swain.....	do.....	New York.....	1,320
Edward S. Taft.....	Watchman.....	Maryland.....	900
Oran Thompson.....	Messenger.....	Washington, D. C.....	840
Sallie S. Thompson.....	Stenographer.....	Virginia.....	1,320
Randolph Toliver.....	Laborer.....	Washington, D. C.....	840
Gertrude B. Triplett.....	Telephone operator.....	do.....	1,080
Landon W. Trudgian.....	Secretary to the secretary.....	do.....	1,680
Susan N. Van Dyke.....	Clerk.....	do.....	1,440
Joseph J. Verdi, jr.....	Typewriter repairman.....	do.....	1,800
Emma Von Toerne.....	Stenographer.....	Wisconsin.....	1,680
Lillian Wagner.....	do.....	Minnesota.....	1,440
Mrs. May Wagner.....	Senior typist.....	Washington, D. C.....	1,320
Claire Walker.....	Stenographer.....	Florida.....	1,320
Eva A. Walker.....	Library assistant.....	Nevada.....	1,440
Mrs. Ada L. Wasney.....	Senior typist.....	Washington, D. C.....	1,320
Mrs. Alma L. Webster.....	do.....	do.....	1,320
William D. Weist, jr.....	Clerk.....	Ohio.....	1,680
George F. Wells.....	Assistant counsel.....	Washington, D. C.....	5,000
Marchant Wentworth.....	Messenger.....	do.....	600
Mrs. Essie Wheeler.....	Matron.....	do.....	600
Wanner L. Wilkerson.....	Watchman.....	Virginia.....	1,200
Mrs. Marion Wilkins.....	Telephone operator.....	Washington, D. C.....	1,080
Bertha E. Wolfe.....	Senior typist.....	do.....	1,560
Erskine E. Wood.....	Attorney.....	Oregon.....	7,200
William M. Woods.....	Assistant disbursing officer.....	Massachusetts.....	2,700
Clifton Woodson.....	Elevator operator.....	Washington, D. C.....	360
Virginia E. Woodward.....	Senior typist.....	Maryland.....	1,200

TABLE II.—*Laws from 1914 to date affecting the Shipping Board.*

- ACTION FOR DEATH.**—An act relating to the maintenance of action for death on the high seas and other navigable waters. (Public, No. 165. 66th Cong., 2d sess. Mar. 30, 1920.)
- AMENDMENTS TO REVISED STATUTES (sec. 336).**—To amend section 336 of the Revised Statutes of the United States relating to the annual report on the statistics of commerce and navigation of the United States with foreign countries. (Public, No. 250. 65th Cong. Jan. 25, 1919.)
- REGISTRY OF FOREIGN-BUILT VESSELS.**—An act to provide for the admission of foreign-built vessels to American registry for the shipping trade, and for other purposes. (Public, No. 175. 63d Cong. Aug. 18, 1914.)
- APPROPRIATIONS AND DEFICIENCIES.**—An act making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1918. (Public, No. 92. 65th Cong. June 30, 1918.)
- APPROPRIATIONS—DEFICIENCIES.**—Appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1918, and prior fiscal years, on account of war expenses, and for other purposes. (Public, No. 191. 65th Cong. July 8, 1918.)
- APPROPRIATIONS—DEFICIENCIES.**—An act making appropriations to supply the deficiencies in appropriations for the fiscal year ending June 30, 1919, and prior fiscal years, and for other purposes. (Public, No. 5. 66th Cong. June 30, 1919.)
- APPROPRIATIONS—DEFICIENCIES.**—An act making appropriations to supply deficiencies in appropriating for the fiscal year ending June 30, 1919, and prior fiscal years, and for other purposes. (Public, No. 275. 65th Cong. Feb. 25, 1919.)
- APPROPRIATIONS—DEFICIENCIES.**—Appropriation, out of any money in the Treasury not otherwise appropriated, to supply deficiencies in appropriations for the fiscal year ending June 30, 1919, and prior fiscal years, on account of war expenses, and for other purposes. (Public, No. 233. 65th Cong. Nov. 4, 1918.)
- APPROPRIATIONS—DEFICIENCIES.**—An act making appropriations to supply deficiencies in appropriations for the fiscal year ending June 30, 1920, and prior fiscal years, and for other purposes. (Public, No. 73. 65th Cong. Oct. 6, 1917.)
- APPROPRIATIONS—DEFICIENCIES.**—An act making appropriations to supply deficiencies, in appropriations for the fiscal year ending June 30, 1920, and prior fiscal years, and for other purposes. (Public, No. 155. 66th Cong., 2d sess. Mar. 6, 1920.)
- APPROPRIATIONS—SUNDRY CIVIL.**—An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1918. (Public, No. 21. 65th Cong. June 12, 1917.)
- APPROPRIATIONS—SUNDRY CIVIL.**—An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1919, and for other purposes. (Public, No. 181. 65th Cong. July 1, 1918.)
- APPROPRIATIONS—SUNDRY CIVIL.**—An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1920, and for other purposes. (Public, No. 21. 66th Cong., 1st sess. July 19, 1919.)
- APPROPRIATIONS—SUNDRY CIVIL.**—An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1920, and for other purposes. (Public, No. 246. 66th Cong., 2d sess. June 5, 1920.)
- APPROPRIATIONS—URGENT DEFICIENCIES.**—An act making appropriations to supply urgent deficiencies in appropriations for the fiscal year ending June 30, 1918, and prior fiscal years, on account of war expenses, and for other purposes. (Public, No. 109. 65th Cong. Mar. 28, 1918.)
- APPROPRIATIONS—URGENT DEFICIENCIES.**—First billion-dollar appropriation and providing for the requisitioning of ships. (Public, No. 23. 65th Cong. June 15, 1917.)
- APPROPRIATIONS—URGENT DEFICIENCIES.**—Second billion-dollar appropriation law. (Public, No. 64. 65th Cong. Oct. 6, 1917.)
- AUTHORITY OF COMMISSIONER OF NAVIGATION.**—An act authorizing the Commissioner of Navigation to change the names of vessels. (Public, No. 144. 66th Cong., 2d sess. Feb. 19, 1920.)
- BILLS OF LADING.**—An act relating to bills of lading in interstate and foreign commerce. (Public, No. 239. 66th Cong. Aug. 29, 1916.)
- CHARTER AND FREIGHT RATES, REQUISITIONED VESSELS.**—Conferring on the President power to prescribe charter rates and to requisition vessels and for other purposes. (Public, No. 202. 65th Cong. July 18, 1918.)
- CIVIL RIGHTS LAW.**—Providing for the protection of the civil rights of soldiers and sailors during the war. (Public, No. 103. 65th Cong., 2d sess. Mar. 8, 1918.)

- COASTWISE TRADE.**—Giving the United States Shipping Board power to suspend present provisions of law and permit vessels of foreign registry and foreign-built vessels admitted to American registry under the act of August 18, 1914, to engage in the coastwise trade during the present war and for a period of 120 days thereafter, except the coastwise with Alaska. (Public, No. 73. 65th Cong. Oct. 6, 1917.)
- COMPENSATION, LABORERS IN CUSTOMS SERVICE.**—An act to authorize the Secretary of the Treasury to fix compensation of certain laborers in the Customs Service. (Public, No. 164. 66th Cong., 2d sess. Mar. 24, 1920.)
- COMPENSATION LAWS.**—Extending the compensation laws to admiralty jurisdiction. (Public, No. 82. 65th Cong., 2d sess. October 6, 1917.)
- CONFISCATION OF VESSELS.**—Joint resolution authorizing the President to take over for the United States the possession and title of any vessel within its jurisdiction, which at the time of coming within was owned in the whole or in part by any corporation, citizen, or subject of any nation with which the United States may be at war, or was under register of any such nation, and for other purposes. (Public, No. 2. 65th Cong. May 12, 1917.)
- CONTRACTS.**—An act to provide relief in cases of contracts connected with the prosecution of the war, and for other purposes. (Public, No. 322. 65th Cong. Mar. 2, 1919.)
- DISPOSITION OF PROPERTY.**—An act to provide for the promotion and maintenance of the American merchant marine, to repeal certain emergency legislation, and provide for the disposition, regulation, and use of property acquired thereunder, and for other purposes. (Public, No. 261. 66th Cong., 2d sess. June 5, 1920.)
- DOCUMENTING VESSELS.**—Requiring, numbering, and recording of undocumented vessels. (Public, No. 165. 65th Cong., 2d sess. June 7, 1918.)
- ESPIONAGE ACT.**—To punish acts of interference with the foreign relations, the neutrality, and the foreign commerce of the United States, to punish espionage, and better to enforce the criminal laws of the United States, and for other purposes. (Public, No. 24. 65th Cong. June 15, 1917.)
- EXPORT TRADE LAW.**—To promote export trade. (Public, No. 126. 65th Cong., 2d sess. Apr. 10, 1918.)
- FEDERAL RESERVE ACT.**—An act to amend the act approved December 23, 1913, known as the Federal reserve act, as amended, to be further amended by adding a new section known as "Banking corporations authorized to do foreign banking business." (Public, No. 106. 66th Cong., 2d sess. Dec. 24, 1919.)
- FEDERAL RESERVE ACT, AMENDMENT.**—An act amending section 25 of the act approved December 23, 1913, known as the Federal reserve act, as amended by the act approved September 7, 1916. (Public, No. 48. 66th Cong., 1st sess. Sept. 17, 1919.)
- GERMAN PROPERTY.**—Authorizing the Alien Property Custodian to take over the German port facilities in New York City. (Public, No. 109. 65th Cong., 2d sess. Mar. 28, 1918.)
- HOUSING LAW.**—Emergency Fleet housing law. (Public, No. 102. 65th Cong., 2d sess. Mar. 1, 1918.)
- INSPECTORS.**—Permitting appeals from the decisions of local steamboat inspectors. (Public, No. 166. 65th Cong., 2d sess. June 10, 1918.)
- INTERNED GERMAN SHIPS.**—Seizure of German interned ships. (Public, No. 37. 65th Cong., 1st sess. Aug. 8, 1917.)
- LADING AND UNLADING OF VESSELS.**—An act to amend an act entitled "An act to provide for the lading and unlading of vessels by night, the preliminary entry of vessels, and for other purposes." (Public, No. 131. 66th Cong., 2d sess. Feb. 7, 1920.)
- MERCHANT MARINE ACT.**—An act to provide for the promotion and maintenance of the American merchant marine, to repeal certain emergency legislation, and provide for the disposition, regulation, and use of property acquired thereunder, and for other purposes. (Public, No. 261. 66th Cong., 2d sess. June 5, 1920.)
- NATURALIZATION LAWS.**—Permitting seamen to serve on merchant vessels after three years after taking out naturalization papers and giving him protection as American citizen after declaring their intention of taking out papers. (Public, No. 144. 65th Cong., 2d sess. May 9, 1918.)
- OIL.**—An act to promote the mining of coal, phosphate, oil, oil shale, gas, and sodium on the public domain. (Public, No. 146. 66th Cong., 2d sess. Feb. 25, 1920.)
- PANAMA CANAL ACT, AMENDMENT.**—An act to amend section 5 of "An act to provide for the opening, maintenance, protection, and operation of the Panama Canal and the sanitation of the Canal Zone," approved August 24, 1912. (Public, No. 113. 63d Cong. June 15, 1914.)



- RADIO STATIONS.**—A joint resolution to authorize the operations of Government-owned radio stations for the use of the general public, and for other purposes. (Public, No. 48. 66th Cong., 2d sess. June 5, 1920.)
- SCREW THREADS.**—Providing for the appointment of a commission to standardize screw threads. (Public, No. 201. 65th Cong. July 18, 1918.)
- SEAMEN.**—Permitting seamen to become citizens of the United States for the purpose of serving on merchant marine vessels on their making application to become citizens. (Public, No. 141. 65th Cong., 2d sess. May 9, 1918.)
- SEAMEN ACT.**—An act to promote the welfare of American seamen in the merchant marine of the United States: to abolish arrest and imprisonment as a penalty for desertion and to secure the abrogation of treaty provisions in relation thereto; and to promote safety at sea. (Public, No. 302. 63d Cong. June 12, 1916.)
- SHIPPING BOARD, CREATION OF.**—An act to establish a United States Shipping Board for the purpose of encouraging, developing, and creating a naval auxiliary and a naval reserve and a merchant marine to meet the requirements of the commerce of the United States with its Territories and possessions and with foreign countries; to regulate carriers by water engaged in the foreign and interstate commerce of the United States; and for other purposes. (Public, No. 260. 64th Cong. Sept. 7, 1916.)
- SHIPPING BOARD ACT, AMENDMENT.**—Amending the act approved September 7, 1916, entitled "An act to establish a United States Shipping Board for the purpose of encouraging, developing, and creating a naval auxiliary and naval reserve and a merchant marine to meet the requirements of the commerce of the United States with its Territories and possessions and with foreign countries; to regulate carriers by water in the foreign and interstate commerce of the United States; and for other purposes." (Public, No. 198. 65th Cong. July 15, 1918.)
- STEAM VESSELS, REGULATION OF.**—An act extending the provisions for the regulation of steam vessels owned or operated by the United States Shipping Board, and for other purposes. (Public, No. 65. 66th Cong., 1st sess. Oct. 14, 1919.)
- STEAMBOAT-INSPECTION SERVICE.**—Authorizing appeals from the decisions of local steamboat inspectors. (Public, No. 166. 65th Cong., 2d sess. June 10, 1918.)
- SUITS IN ADMIRALTY.**—An act authorizing suits against the United States in admiralty, suits for salvage services, and providing for the release of merchant vessels belonging to the United States from arrest and attachment in foreign jurisdiction, and for other purposes. (Public, No. 156. 66th Cong., 2d sess. Mar. 9, 1920.)
- SUPPLIES.**—An act authorizing the President during the existing emergency to sell supplies, materials, equipment, or other property, heretofore or hereafter purchased, acquired, or manufactured by the United States, in connection with or incidental to the prosecution of the war. (Public, No. 145. 65th Cong., 2d sess. May 10, 1918.)
- TRADING WITH THE ENEMY LAW.**—Law defining, regulating, and punishing trading with the enemy and creating the War Trade Board. (Public, No. 91. 65th Cong., 2d sess. Oct. 6, 1917.)
- TRANSPORTATION SYSTEMS AROUND SHIPYARDS.**—Authorizing the Emergency Fleet Corporation to take over the transportation systems around shipbuilding yards. (Public, No. 138. 65th Cong., 2d sess. Apr. 22, 1918.)
- WAR-RISK INSURANCE ACT, AMENDMENT.**—An act to amend the war-risk insurance act. (Public, No. 195. 65th Cong. July 11, 1918.)

TABLE III(a).—Statement of accidents and estimated amounts and losses from July 1 to Dec. 31, 1919.

	Grounded.		Heavy weather.		Machinery.		Lost anchor.		Lost propeller blades.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
<i>July.</i>										
Steel.....	11	\$133,000.00	5	\$12,000.00	8	\$107,000.00	1	\$5,000.00	8	\$71,500.00
Wood.....	3	10,000.00	2	10,250.00	4	12,500.00	2	7,000.00		
<i>August.</i>										
Steel.....	15	119,000.00	5	24,000.00	7	83,500.00	5	20,500.00	5	14,000.00
Wood.....	3	41,500.00			3	6,000.00				
Concrete.....					2	2,500.00	1	3,000.00		
<i>September.</i>										
Steel.....	7	25,000.00	10	23,500.00	4	27,500.00	1	5,500.00	5	102,500.00
Wood.....	2	35,000.00	2	4,500.00	2	5,500.00				
<i>October.</i>										
Steel.....	24	273,500.00	6	13,500.00	8	17,500.00	2	4,500.00	5	9,500.00
Wood.....	2	10,000.00								
<i>November.</i>										
Steel.....	11	398,000.00	3	8,000.00	11	23,500.00	2	5,000.00	3	28,000.00
Wood.....	1	1,000.00			1	1,000.00				
<i>December.</i>										
Steel.....	8	46,500.00	5	9,500.00	3	3,000.00	3	10,500.00	5	18,000.00
Wood.....	2	105,000.00	3	5,000.00	8	25,500.00				
Total.....		1,197,500.00		110,250.00		315,000.00		61,000.00		243,500.00

	Leaking.		Torpedoed or mined.		Fire.		Steering gear.		Collision.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
<i>July.</i>										
Steel.....	1	\$1,500.00	1	\$735,000.00	3	\$11,000.00	5	\$15,000.00	48	\$116,000.00
Wood.....	1	2,500.00							1	50,000.00
<i>August.</i>										
Steel.....	1	10,000.00	1	200,000.00	2	51,000.00	5	7,500.00	31	129,800.00
Wood.....	1	1,000.00			1	30,000.00			6	16,500.00
Concrete.....									1	1,000.00
<i>September.</i>										
Steel.....	3	9,000.00		2,000.00	1	1,000.00	1	2,000.00	24	94,500.00
Wood.....	1	1,000.00			2	8,500.00				
<i>October.</i>										
Steel.....			4	18,000.00	4	18,000.00	1	2,500.00	35	66,000.00
Wood.....	2	3,500.00								
<i>November.</i>										
Steel.....			1	100,000.00	4	9,000.00			26	169,000.00
Wood.....	1	5,000.00			2	3,000.00			6	14,500.00
<i>December.</i>										
Steel.....					2	6,000.00			34	125,220.00
Wood.....									1	500.00
Concrete.....									1	1,000.00
Total.....		33,500.00		1,055,000.00		137,500.00		27,000.00		784,020.00



TABLE III(b).—Statement of accidents and estimated amounts and losses from Jan. 1 to June 30, 1920—Continued.

	Grounded.		Heavy weather.		Machinery.		Lost anchor.		Lost propeller blades.	
	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.
<i>May.</i>										
Steel.....	13	\$120,800.00	7	\$21,500.00	4	\$37,500.00	4	\$10,000.00	12	\$99,000.00
Wood.....	1	5,000.00	2	12,000.00	1	500.00	2	5,500.00	.....	.....
<i>June.</i>										
Steel.....	24	192,500.00	9	30,500.00	10	42,000.00	2	3,500.00	16	45,000.00
Wood.....	1	500.00	2	11,000.00	1	5,000.00	.....	.....	.....	.....
Total.....	.....	2,309,597.74	.....	286,150.00	.....	693,100.00	.....	167,700.00	.....	419,300.00
Total July, 1919, to June, 1920.....	.....	3,507,007.74	.....	396,400.00	.....	1,008,100.00	.....	228,700.00	.....	662,806.00

	Leaking.		Torpedoed or mined.		Fire.		Steering gear.		Collision.	
	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.
<i>January.</i>										
Steel.....	2	\$6,500.00	.....	.....	11	\$23,003.79	3	\$10,500.00	80	\$379,700.00
Wood.....	1	1,000.00	.....	.....	3	1,500.00	.....	.....	17	40,800.00
Concrete.....	.....	.....	.....	.....	1	8,000.00	.....	.....	3	1,500.00
<i>February.</i>										
Steel.....	5	23,000.00	.....	.....	8	369,500.00	2	2,000.00	63	194,197.99
Wood.....	.....	.....	.....	.....	3	500.00	.....	.....	13	19,879.27
Concrete.....	1	2,500.00	.....	.....	.....	.....	.....	.....	1	500.00
<i>March.</i>										
Steel.....	3	13,000.00	.....	.....	2	7,500.00	4	13,500.00	31	128,500.00
Wood.....	.....	.....	.....	.....	.....	.....	.....	.....	10	38,929.17
Concrete.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2,500.00
<i>April.</i>										
Steel.....	1	72,878.00	.....	.....	3	11,800.00	1	5,000.00	46	137,567.88
Wood.....	.....	.....	.....	.....	.....	.....	.....	.....	6	12,034.00
<i>May.</i>										
Steel.....	2	1,000.00	.....	.....	3	60,300.00	1	5,000.00	35	192,641.78
Wood.....	.....	.....	.....	.....	1	.....	.....	.....	12	23,275.00
Concrete.....	.....	.....	.....	.....	.....	.....	.....	.....	1	3,000.00
<i>June.</i>										
Steel.....	4	11,500.00	.....	.....	5	20,450.00	2	110,000.00	51	580,860.00
Wood.....	.....	.....	.....	.....	2	101,800.00	1	1,000.00	6	6,300.00
Concrete.....	.....	.....	.....	.....	1	5,000.00	.....	.....	.....	.....
Total.....	.....	131,378.00	.....	.....	.....	608,553.79	.....	152,000.00	.....	1,712,185.09
Total July, 1919, to June, 1920.....	.....	164,878.00	.....	1,055,000.00	.....	746,053.79	.....	179,000.00	.....	2,496,205.09

TABLE III(b).—Statement of accidents and estimated amounts and losses from Jan. 1 to June 30, 1920—Continued.

	Miscellaneous.		Acci- dents, num- ber.	Steel, amount.	Wood, amount.	Concrete, amount.	Losses, total.	Total losses and accidents.
	Num- ber.	Amount.						
<i>January.</i>								
Steel.....	16	\$27,000.00	191	\$895,653.79			\$2,111,200.00	\$3,471,853.79
Wood.....	3	4,000.00	43		\$453,000.00			
Concrete.....			5			\$12,000.00		
<i>February.</i>								
Steel.....	13	106,300.00	173	1,494,297.99			3,980,000.00	5,558,977.26
Wood.....	1	500.00	25		131,679.27			
Concrete.....			2			3,000.00		
<i>March.</i>								
Steel.....	10	229,050.00	96	1,659,757.74			4,709,908.13	6,438,800.04
Wood.....	2	2,500.00	14		66,429.17			
Concrete.....			1			2,500		
<i>April.</i>								
Steel.....	2	4,800.00	96	366,045.88				422,579.88
Wood.....			12		51,534.00			
Concrete.....			1			5,000.00		
<i>May.</i>								
Steel.....	8	15,500.00	89	563,241.78			1,760,000.00	2,374,516.78
Wood.....	1	2,000.00	20		43,275.00			
Concrete.....			1			3,000.00		
<i>June.</i>								
Steel.....	7	14,500.00	130	1,000,810.00			810,000.00	1,957,610.00
Wood.....	3	17,000.00	16		141,800.00			
Concrete.....			1			5,000		
Total.....		423,150.00	916	5,979,807.18	892,717.44	30,500.00	13,321,103.13	20,224,127.75
Total, July, 1919, to June, 1920.....		748,150.00	1,458	9,804,827.18	1,349,487.44	38,000.00	17,083,103.13	28,275,397.75

## PART II.—DIVISION OF CONSTRUCTION.

TABLE I.—Shipyards building vessels for Emergency Fleet Corporation, June 30, 1920.

## STEEL SHIPS.

## North Atlantic district:

Atlantic Corporation, Portsmouth, N. H.  
 Groton Iron Works, Groton, Conn.  
 Newburgh Shipyards (Inc.), Newburgh, N. Y.  
 Providence Engineering Corporation, Providence, R. I.

## Delaware River district:

New York Shipbuilding Corporation, Camden, N. J.  
 Bethlehem Shipbuilding Corporation, Wilmington, Del.  
 Merchant Shipbuilding Corporation, Chester, Pa.  
 Merchant Shipbuilding Corporation, Bristol, Pa.  
 William Cramp & Sons, Philadelphia, Pa.  
 The Pusey & Jones Co., Gloucester, N. J.  
 The Pusey & Jones Co., Wilmington, Del.  
 American International Shipbuilding Corporation, Hog Island, Pa.

## Middle Atlantic district:

Baltimore Dry Dock & Shipbuilding Co., Baltimore, Md.  
 Bethlehem Shipbuilding Corporation, Sparrows Point, Md.  
 Newport News Shipbuilding & Dry Dock Co., Newport News, Va.  
 Geo. A. Fuller Co., Wilmington, N. C.

## Southern district:

Oscar Daniels Co., Tampa, Fla.  
 Pensacola Shipbuilding Co., Pensacola, Fla.  
 Mobile Shipbuilding Co., Mobile, Ala.  
 Doullut & Williams, New Orleans, La.  
 Nashville Bridge Co., Nashville, Tenn.

## Pacific district:

Bethlehem Shipbuilding Corporation, Alameda, Calif.  
 Moore Shipbuilding Co., Oakland, Calif.  
 Hanlon Dry Dock & Shipbuilding Co., Oakland, Calif.  
 Long Beach Shipbuilding Co., Long Beach, Calif.  
 Los Angeles Shipbuilding & Dry Dock Co., San Pedro, Calif.  
 Pacific Coast Shipbuilding Co., Bay Point, Calif.  
 Union Construction Co., Oakland, Calif.  
 Western Pipe & Steel Co., San Francisco, Calif.  
 Todd Dry Dock & Construction Corporation, Tacoma, Wash.  
 Southwestern Shipbuilding Co., San Pedro, Calif.

## Great Lakes district:

Saginaw Shipbuilding Co., Saginaw, Mich.  
 Manitowoc Shipbuilding Co., Manitowoc, Wis.

## WOOD AND CONCRETE VESSELS.

## North Atlantic district:

A. C. Brown & Sons, Tottenville, N. Y. (Tugs.)  
 International Shipbuilding & Marine Engine Corporation, Nyack, N. Y. (Tugs.)  
 J. H. Mathis Co., Camden, N. J. (Tugs.)

## Middle Atlantic district:

Chance Marine Construction Co., Annapolis, Md. (Tugs.)

## Southern district:

Gibbs Gas Engine Co., Jacksonville, Fla. (Tugs.)  
 A. Bentley & Sons, Jacksonville, Fla.

## Pacific district:

Pacific Marine & Construction Co., San Diego, Calif.  
 San Francisco Shipbuilding Co., Oakland, Calif.

## Great Lakes district:

Dachel-Carter Boat Co., Benton Harbor, Mich. (Tugs.)

TABLE II.—Yards in which major interest, owned by the *Emergency Fleet Corporation*, has been disposed of or transferred to the jurisdiction of the *Supply and Sales Division*, June 30, 1920.

## North Atlantic district:

L. H. Shattuck (Inc.), Portsmouth, N. H.  
 Cumberland Shipbuilding Co. (installation plant), Portland, Me.  
 Housatonic Shipbuilding Co., Stratford, Conn.  
 Traylor Shipbuilding Corporation, Cornwells, Pa.  
 Foundation Co., Kearny, N. J.  
 Bayles Shipyard, Port Jefferson, Long Island, N. Y.  
 Submarine Boat Corporation, Newark Bay, N. J.

## Middle Atlantic district:

Carolina Shipbuilding Corporation, Wilmington, N. C.  
 Liberty Shipbuilding Co., Wilmington, N. C.  
 Maryland Shipbuilding Co., Sollers Point, Md.  
 Missouri Valley Bridge & Iron Co., Quantico, Va.  
 C. H. Tenney & Co., Hampton, Va.  
 Henry Smith & Sons Co., Baltimore, Md.  
 Richmond Boiler Plant, Richmond, Va.

## Southern district:

Terry Shipbuilding Corporation, Savannah, Ga.  
 National Shipbuilding & Dry Dock Co., Savannah, Ga.  
 American Shipbuilding Co., Brunswick, Ga.  
 Merrill-Stevens Shipbuilding Co. Jacksonville, Fla.  
 Fred T. Ley & Co., Mobile, Ala.  
 Jahncke Shipbuilding Co., Madisonville, La.  
 J. M. Murdock, Jacksonville, Fla.  
 Midland Bridge Co., Houston, Tex.  
 Union Bridge & Construction Co., Morgan City, La.

## Pacific district:

Liberty Plant, Alameda, Calif.  
 Grant Smith-Porter Ship Co., Aberdeen, Wash.  
 Sanderson & Porter, Raymond, Wash.  
 Columbia River Shipbuilding Corporation, Portland, Ore.

## Oregon district:

Grant Smith-Porter Ship Co., St. Johns, Portland, Ore.

TABLE III.—Data on marine railway and dry-dock contracts.

MARINE RAILWAYS.

Contract No.	Name of contractor.	Location.	Date of contract.	Contract date of completion.	Present estimated date of completion.	Size.	Type.	Per cent completed to May 31, 1920.	Remarks.
M. R. 1.	Henderson Shipbuilding Co.	Mobile, Ala.	Mar. 25, 1918	Aug. 22, 1918	In operation Nov. 7, 1918.	2,500-ton.	Crandall Eng. Co.	100	Excess advances are considered basis of amount in interest loan being returned. Contract canceled Oct. 2, 1918.
M. R. 2.	Newcomb Lifeboat Co.	Hampton, Va.	Mar. 26, 1918	July 4, 1918	Contract canceled Oct. 2, 1918.	do.	do.	0	\$23,364.64 represents materials purchased, but which will partly be sold to Southern Shipyard Corporation.
M. R. 3.	Crownshield Shipbuilding Co.	South Somerset, Mass.	Apr. 9, 1918	Aug. 9, 1918	In operation Nov. 28, 1918.	do.	do.	100	Emergency Fleet Corporation has taken over entire plant with this company as operators. Profits will be applied against company's indebtedness to Emergency Fleet Corporation.
M. R. 4.	Beaumont Shipbuilding & Dry Dock Co.	Beaumont, Tex.	Mar. 30, 1918	Aug. 1, 1918	do.	do.	do.	100	
M. R. 5.	Cumberland Shipbuilding Co.	Portland, Me.	Apr. 16, 1918	Aug. 16, 1918	In operation Nov. 22, 1918.	do.	do.	100	
M. R. 6.	Tampa Dock Co.	Tampa, Fla.	Apr. 17, 1918	July 26, 1918	In operation May 19, 1919.	do.	do.	100	
M. R. 7.	Federal Marine Ry. Co.	Savannah, Ga.	Mar. 23, 1918	July 23, 1918	In operation Dec. 19, 1919.	do.	do.	100	
M. R. 9.	Barnes & Tibbetts	Alameda, Calif.	May 22, 1918	Sept. 22, 1918	In operation Dec. 31, 1919.	do.	do.	100	
M. R. 10.									
M. R. 12.	American Dredging Co.	Camden, N. J.	Aug. 7, 1918	July 20, 1918	In operation Nov. 18, 1918.	4,000-ton.	do.	100	Emergency Fleet Corporation has no financial interest in this contract.
M. R. 13.	Puget Sound Marine Ry. Co.	Tacoma, Wash.	Dec. 17, 1918	May 17, 1919	Contract suspended.	3,200-ton.	do.	0	This contract has been suspended.

<sup>1</sup> Contract provides for repair plant constructed at borrower's own cost.  
<sup>2</sup> Contract provides for repair plant constructed with Emergency Fleet Corporation financial assistance.

TABLE III.—Data on marine railway and dry-dock contracts—Continued.

Contract No.	Name of contractor.	Location.	Date of contract.	Contract date of completion.	Present estimated date of completion.	Size.	Type.	Per cent completed to May 31, 1920.	Remarks.
M. R. 14 <sup>1</sup>	Lord Dry Dock Corporation.	Providence, R. I.	Dec. 6, 1918	June 6, 1919	In operation Jan. 7, 1920.	3,200-ton...	Crandall Eng. Co.	97	Contract canceled May 21, 1920.
M. R. 15 <sup>2</sup>	Astoria Marine Iron Works.	Astoria, Oreg.	Feb. 1, 1919	Aug. 15, 1919	Contract canceled.	4,000-ton...	.....do.....	15	This contract is replacing contract No. 2 with Newcomb Marine Co. The capacity of the railway will be increased to 3,000 tons.
M. R. 16 <sup>2</sup>	Southern Shipyard Corporation.	Newport News, Va.	Apr. 21, 1919	Oct. 18, 1919	July 15, 1920.....	3,000-ton...	.....do.....	80	
DRY DOCKS.									
D. D. 1..	Alabama Docks Co.....	Mobile, Ala.....	Aug. 2, 1919	.....	In operation Oct. 31, 1919.	10,000-ton..	W. T. Donnelly..	100	
D. D. 3..	Bethlehem Shipbuilding Corporation (Ltd.).	Sparrows Point, Md.	Jan. 15, 1918	Sept. 15, 1918	In operation Mar. 31, 1919.	20,000-ton..	.....do.....	100	
D. D. 4..	Jahncke Dry Dock & Repair Co.	New Orleans, La.	Jan. 31, 1918	Dec. 4, 1918	In operation Apr. 13, 1920.	8,000-ton...	Crandall Eng. Co.	100	This dock was constructed by the Beaumont Shipbuilding & Dry Dock Co., Beaumont, Tex., and sold to the Jahncke Shipbuilding & Dry Dock Co.
D. D. 5 <sup>1</sup> .	Galveston Dry Dock & Construction Co.	Galveston, Tex.	Mar. 9, 1919	Apr. 4, 1919	In operation Jan. 7, 1920.	10,000-ton..	W. T. Donnelly..	100	Title to and construction of dry dock taken over by Emergency Fleet Corporation, Jahncke Co. to purchase same in 10 yearly installments. Repair plant to be constructed by Jahncke Co., and to be completed at the same time as dry dock. Emergency Fleet Corporation loan \$475,000 on repair plant.
D. D. 7 <sup>2</sup> .	Jahncke Dry Dock & Repair Co.	New Orleans, La.	Mar. 5, 1919	.....	In operation Feb. 16, 1920.	.....do.....	.....do.....	99	



D. D. 8) and M. R. 83)	Merrill-Stevens Ship- building Corporation.	Jacksonville, Fla.	.....	.....	Work suspended.....	{ 2,500-ton marine railway; 6,000-ton dry dock. }	Crandall Eng. Co. { 54 94	{ The contract with the Jackson- ville Dry Dock & Ship Repair Co. was canceled and the plant sold to the Merrill-Stevens Shipbuilding Co. who will complete dry dock with their own funds. The mortgage on this dry dock has been liquidated and the Fleet Corporation has no fur- ther financial interest in this property. Ownership of these docks to pass to United States Navy upon completion. Emergency Fleet Corporation receives no finan- cial return on this contract. Emergency Fleet Corporation furnishes funds to construct dry docks; not to exceed esti- mated cost, \$450,000. Bruce Co. to construct repair plant. Es- timated cost, \$150,000. Emergency Fleet Corporation to advance total cost of dock up to \$550,000 and hold title. Con- tractor to purchase dock at ac- tual cost plus 6 per cent inter- est. Contractor to construct repair plant with own funds.
D. D. 9 <sup>2</sup> .	Savannah Dry Dock & Repair Co.	Savannah, Ga.	June 18, 1918	Nov. 18, 1918	Completed Oct. 7, 1919.	8,000-ton.....	do.....	100
D. D. 10.	Geo. Leary Construction Co.	United States Navy Yard, Norfolk, Va.	Aug. 27, 1918	Oct. 31, 1919	In operation Apr. 5, 1920.	Twin grav- ity docks.	Barclay Parsons & Klapp.	100
D. D. 11 <sup>1</sup>	Bruce Dry Dock Co.....	Pensacola, Fla.	Apr. 9, 1919	May 23, 1920	In operation June 17, 1920.	5,000-ton.....	Crandall Eng. Co.	81
D. D. 14 <sup>1</sup>	Ramberg Dry Dock & Repair Co.	Brooklyn, N. Y.	May 22, 1919	June 14, 1920	Jan. 1, 1921.....	do.....	L-off Shore.....	27

EMERGENCY FLEET CORPORATION DRY DOCK PONTOON CONTRACTS:

P. C. 1...	Atlantic Gulf & Pacific..	New York.....	May 22, 1919	Jan. 24, 1921	.....	14,200-ton pontoons.	Emergency Fleet Corporation yards and docks.	26
P. C. 2...	W. H. Gabagan (Inc.).....	do.....	do.....	Nov. 9, 1920	.....	10 2,000-ton pontoons.	do.....	12
P. C. 3...	Kingston Shipbuilding Co.	Kingston, N. Y.	do.....	July 27, 1920	.....	8 2,000-ton pontoons.	do.....	55
P. C. 4...	Narragansett Shipbuild- ing Co.	Tiverton, R. I.	do.....	Sept. 10, 1920	.....	do.....	do.....	5

<sup>1</sup> Contract provides for repair plant constructed at borrower's own cost.  
<sup>2</sup> Contract provides for repair plant constructed with Emergency Fleet Corporation financial assistance.  
<sup>3</sup> 8 10,000-ton dry docks are being constructed; total estimated cost, \$6,800,000. Pontoons being built under contracts. Contracts for machinery installation will be let when pontoons are ready.





TABLE IV.—Summary of keels laid—Continued.

Year and month.	Contract composite.				Contract concrete.				Total active.	
	Active.		Canceled.		Active.		Canceled.		Num-ber.	Dead-weight tons.
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.		
1916.										
April.....									1	8,130
May.....									1	7,359
June.....									2	18,530
July.....									4	42,900
August.....									2	17,800
September.....									1	7,000
October.....									6	26,300
November.....									9	54,280
December.....									4	32,800
Total.....									30	225,040
1917.										
January.....									10	101,800
February.....									7	54,186
March.....									13	111,316
April.....									23	127,600
May.....									28	173,385
June.....									20	101,250
July.....									52	246,475
August.....	2	7,000							52	267,654
September.....	6	21,000							64	327,750
October.....	3	10,500							92	454,600
November.....	3	10,800							71	365,105
December.....										
Total.....	14	49,000							462	2,403,562
Total to date.....	14	49,000							492	2,628,611
1918.										
January.....	4	14,000							63	315,300
February.....									70	372,326
March.....			3	10,500					62	470,825
April.....			1	3,500	1	3,000			86	488,725



TABLE V.—Summary of ships launched.

	Requisitioned steel.		Contract steel.				Contract wood.				Contract composite.		Contract concrete.		Total active.		
	Active.		Active.		Canceled.		Active.		Canceled.		Active.		Active.		Total active.		
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	
1917.																	
April.....	2	12,500													2	12,500	
May.....	3	20,330													3	20,330	
June.....	4	24,400													4	24,400	
July.....	7	39,835													7	39,835	
August.....	16	127,055													16	127,055	
September.....	12	63,339													12	63,339	
October.....	17	116,576													17	116,576	
November.....	19	135,806	1	8,800											20	144,606	
December.....	21	134,730	2	17,600											23	152,330	
Total.....	101	674,570	3	26,400			2	8,000							106	706,970	
1918.																	
January.....	15	103,700	1	8,800											16	112,500	
February.....	23	132,400	3	21,150				19,500							31	173,050	
March.....	27	168,766	6	51,650				42,000							44	262,416	
April.....	22	119,680	7	45,850				64,000							46	229,730	
May.....	28	166,130	14	85,025				115,700							74	370,355	
June.....	13	77,050	13	74,300				80,200							49	235,050	
July.....	33	218,925	35	218,725				195,750							124	640,400	
August.....	17	120,730	29	174,650				115,950							83	431,880	
September.....	19	146,255	40	215,525				111,400							93	483,720	
October.....	6	54,475	41	244,700				106,300							80	405,475	
November.....	10	85,300	39	230,200				111,450							83	427,450	
December.....	8	59,825	51	327,525				81,800							89	472,150	
Total.....	221	1,463,476	279	1,668,100			298	1,044,050	1	( <sup>1</sup> )		13	45,500	1	3,000	812	4,244,126
Total to date.....	322	2,126,046	282	1,724,500			300	1,052,050	1	( <sup>1</sup> )		13	45,500	1	3,000	918	4,965,096
1919.																	
January.....	3	28,770	23	186,525				89,500							62	304,795	
February.....	7	52,620	45	266,475			14	45,450							68	378,645	

March.....	4	33,200	64	387,158	1	(1)	21	64,250	1	(1)	2	7,000	88	494,608
April.....	1	8,970	71	440,116	42	(1)	42	137,700	1	(1)	2	7,000	116	593,796
May.....	5	46,770	80	512,258	46	5,000	46	144,900	4	(1)	1	3,600	134	718,428
June.....	4	28,000	61	391,650	29		29	83,800	5	(1)	1	7,500	95	511,550
July.....	4	40,925	81	528,858	28		28	75,900	2	(1)	1	3,500	114	649,083
August.....	4	43,895	67	393,933	19	5,000	19	52,150	5	(1)	1	7,500	91	497,478
September.....	2	13,300	61	447,600	19		19	52,150			1		82	513,050
October.....	5	47,500	90	326,175	14		14	23,600			1	3,500	70	400,675
November.....	3	25,800	64	457,953	8	7,500	8	11,900					75	495,453
December.....	3	25,900	55	379,426	7		7	21,150	1	(1)			65	426,376
Total.....	45	396,150	732	4,720,027	273	17,500	273	802,150	21	(1)	5	17,500	1,061	5,968,827
Total to date.....	367	2,524,196	1,014	6,444,527	573	17,500	573	1,854,200	22	(1)	18	63,000	1,979	10,921,923
1920.														
January.....	1	8,970	39	290,560	4		4	9,700					44	309,230
February.....	2	13,300	29	191,150	6		6	14,050					34	218,500
March.....	2	21,500	38	286,308	6		6	7,300					44	315,108
April.....	1	9,000	39	310,525	2	7,500	2	(1)					42	319,825
May.....	1	9,000	17	134,975									18	143,975
June.....	1	12,500	29	247,475							3	22,500	33	282,475
Total.....	8	74,270	188	1,461,268	16	7,500	16	31,050					215	1,589,113
Grand total.....	375	2,668,466	1,202	7,905,820	589	25,000	589	1,885,250	22	(1)	18	63,000	2,194	12,511,086

<sup>1</sup>No tonnage given on tugs.

TABLE VI.—Summary of ships delivered.

Year and month.	Requisitioned steel.		Contract steel.		Contract wood.		Contract composite.		Contract concrete.		Total.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
1917.												
August.....	1	2,930									1	2,930
September.....	7	40,800									7	40,800
October.....	13	85,085									13	85,085
November.....	17	76,310									17	76,310
December.....	12	100,290									12	100,290
Total.....	50	305,215									50	305,215
1918.												
January.....	10	52,641	1	8,800							11	61,441
February.....	14	112,750	1	8,800							15	121,550
March.....	18	150,159	1	8,800							19	158,959
April.....	26	154,005	1	8,800							27	162,805
May.....	27	223,291	5	28,250	1	4,000					33	255,541
June.....	34	195,835	11	83,950	2	8,000					47	287,785
July.....	18	97,305	17	98,300	7	27,500					42	223,105
August.....	23	129,295	19	106,950	23	96,800	2	7,000			67	330,045
September.....	21	140,800	22	116,800	26	96,000	1	3,500			70	357,100
October.....	20	154,325	29	146,750	28	101,700	1	3,500			78	406,275
November.....	15	128,300	32	169,950	12	41,850					59	330,100
December.....	8	55,175	22	169,275	20	74,250	2	7,000			52	305,700
Total.....	247	1,623,881	161	945,425	119	440,100	6	21,000			533	3,030,406
Total to date.....	297	1,929,096	161	945,425	119	440,100	6	21,000			583	3,335,621
1919.												
January.....	3	27,600	15	112,300	11	40,750	1	3,500			30	184,150
February.....	8	60,100	19	132,700	12	42,750	1	3,500			40	239,050
March.....	4	27,200	24	136,925	13	49,750					41	235,875
April.....	4	33,390	75	401,550	32	115,000	2	3,500			112	555,440
May.....	9	82,800	80	529,200	50	180,950	2	7,000			141	779,950
June.....	6	52,825	66	375,333	48	198,050	1	3,500			121	599,708
July.....	7	52,595	66	438,983	53	184,680					125	676,128
August.....	4	24,100	68	469,275	59	203,000	4	14,000			135	714,375
September.....	5	50,895	87	567,991	57	198,000	1	3,500			150	810,386
October.....	3	23,800	74	447,100	42	124,800			1	3,500	120	599,200



November.....	83,885	60	348,875	21	53,450	1	3,500	2	6,500	92	496,220
December.....	26,500	59	439,491	10	25,350					73	491,341
Total.....	560,700	692	4,410,623	408	1,355,500	12	42,000	3	10,000	1,180	6,379,823
Total to date.....	2,489,796	853	5,356,048	527	1,796,600	18	63,000	3	10,000	1,768	9,715,444
1920.											
January.....	13,300	33	283,158	10	27,750			1	3,500	44	284,408
February.....	30,470	41	244,125	9	18,150					43	275,575
March.....	26,800	78	477,883	7	14,750					54	346,983
April.....	13,300	38	237,690	5	4,000			2	15,000	88	518,433
May.....	21,500	26	190,153	3						47	265,960
June.....										31	215,658
Total.....	104,370	248	1,695,397	44	88,650			3	18,500	307	1,906,917
Total to date.....	2,594,166	1,101	7,051,445	571	1,885,250	18	63,000	6	28,500	2,070	11,622,361

TABLE VII.—Ships delivered, by districts.

District.	Requisitioned steel.		Contract steel.		Contract wood.		Contract concrete.		Total.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
North Atlantic.....	38	269,050	106	706,630	101	297,600			248	1,306,680
Delaware River.....	106	866,656	18	144,925					124	1,011,581
American International Shipbuilding Corporation.....			91	682,600					91	682,600
Merchant Shipbuilding Corporation.....			27	243,000					27	243,000
Submarine Boat Corporation.....			118	598,850					118	598,850
Middle Atlantic.....	28	221,660	43	406,250	33	69,600			106	704,510
Southern.....	3	13,000	29	165,600	120	427,100	18	63,000	173	686,700
Pacific.....	100	866,800	300	2,630,350	172	645,150			572	4,142,300
Oregon.....			342	1,266,950	116	443,300			470	1,596,650
Great Lakes.....	99	327,200	25	206,490	29	2,500			25	206,490
Japan.....										
Total.....	374	2,594,166	1,101	7,051,445	571	1,885,250	18	63,000	2,070	11,622,361

TABLE VIII.—Summary of deliveries arranged according to the States in which shipyards are located.

Class of construction.	Maine.		New Hampshire.		Massachusetts.		Connecticut.		New York.		New Jersey.		Pennsylvania.		Delaware.		Maryland.		Virginia.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
<b>IRONWORKING, STEEL.</b>																				
Cargo.....	4	39,000			7	79,650			16	90,500	19	174,050	21	195,379	19	79,100	11	76,900	8	35,460
Tanker.....	4	38,000			2	18,900			3	21,900	12	100,350	12	117,000	4	36,110	2	16,860	4	38,480
Refrigerator.....																				
Collier.....																				
Transport.....											9	70,890								
Passenger and cargo.....											6	34,478	3	97,800						
Total.....	8	77,000			9	97,850			18	112,400	46	379,195	40	384,051	23	115,210	19	193,760	9	87,940
<b>CONTRACT, STEEL.</b>																				
Cargo.....																				
Tanker.....																				
Navy tanker.....																				
Ocean tugs.....																				
Total.....	7	61,600			6	54,600			6	59,800	172	918,975	124	943,500	10	63,000	26	333,800	13	184,050
<b>WOOD.</b>																				
Cargo.....	11	38,500							2	7,000	9	31,500	6	26,000			9	7,000		
Barge.....	10	26,000			1	2,500			1	2,500							7	17,600		
Finished hull.....	8	30,800							3	11,540	1	3,850					2	7,700		
Converted barge.....									2	5,150							2	7,500		
Ocean tugs.....																				
Harbor tugs.....																				
Total.....	29	95,300			6	2,500			17	26,200	11	36,350	8	28,000	1	(1)	24	39,700	6	99,900
<b>CONCRETE.</b>																				
Cargo.....																				
Total.....	37	172,300			21	164,950			1	3,500										
Grand total.....									82	415,850	229	1,658,620	173	1,967,551	84	178,210	69	607,960	34	346,160

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 213

Class of construction.	North Carolina.		Georgia.		Florida.		Alabama.		Mississippi.		Louisiana.		Tennessee.		Texas.		California.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
REQUISITIONED, STEEL.																		
Cargo.....																		
Tankers.....			3	13,000														
Total.....			3	13,000													30	294,600
CONTRACT, STEEL.																		
Cargo.....	4	38,400																
Tankers.....			16	124,500			4	20,000										
Refrigerator.....																		
Transport.....																		
Barge.....							1	7,500										
Harbor tugs.....																		
Total.....	4	38,400	16	124,500	5	27,500											121	1,097,450
WOOD.																		
Cargo.....																		
Tanker.....			4	14,000	15	52,500	2	7,000	10	35,000	6	21,000						
Barge.....			1	2,500	3	7,500												
Finished hull.....			3	11,550	3	11,550												
Converted barge.....	2	7,700							2	7,700	5	16,250						
Sailing vessel hulls.....			1	3,750	1	3,750												
Ocean tugs.....																		
Total.....	2	7,700	11	31,800	22	75,300	2	7,000	12	42,700	14	47,750					59	222,550
COMPOSITE.																		
Cargo.....																		
Tanker.....			6	21,000	4	14,000	6	21,000										
Total.....																		
CONCRETE.																		
Cargo.....																		
Tanker.....	2	7,000	1	3,000			2	15,000										
Total.....	2	7,000	1	3,000			2	15,000										
Grand total.....	8	53,100	18	55,800	45	236,800	15	70,500	12	42,700	22	54,750	2	3,600	59	222,550	180	1,496,900

TABLE VIII.—Summary of deliveries arranged according to the States in which shipyards are located—Continued.

Class of construction.	Oregon.		Washington.		Wisconsin.		Michigan.		Ohio.		Illinois.		Minnesota.		Japan.		Total.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
<b>REQUIREMENTED, STEEL.</b>																		
Cargo.....	25	189,000			21	71,400					4	12,400					290	1,836,689
Tankers.....																	53	919,900
Refrigerator.....			3	27,000													11	56,200
Coiler.....																	9	70,899
Transport.....																	9	71,375
Passenger and cargo.....																	2	9,972
Total.....	25	189,000	45	883,100	21	71,400	32	111,100	33	104,000	4	12,400	9	28,300			374	2,594,166
<b>CONTRACT, STEEL.</b>																		
Cargo.....	57	445,500	122	1,087,400	53	203,400	110	434,150	104	409,550	23	89,700	25	95,750	25	206,490	988	6,488,095
Tankers.....																	41	357,000
Navy tankers.....																	2	78,250
Refrigerator.....																	8	75,200
Transport.....																	1	11,800
Barge.....																	3	11,100
Ocean tugs.....					15	( )											43	( )
Harbor tugs.....					2	( )											8	( )
Total.....	57	445,500	122	1,087,400	71	203,400	110	434,150	104	409,550	23	89,700	25	95,750	25	206,490	1,101	7,051,445
<b>WOOD.</b>																		
Cargo.....	98	371,500	85	313,150	1	2,500											304	1,121,350
Tankers.....																	1	4,700
Barge.....																	92	71,000
Finished hull.....	16	62,500	38	150,350													115	447,700
Converted barges.....	9	34,850	11	40,850													16	206,000
Sailing vessel hull.....	2	8,300															10	34,500
Ocean tugs.....					1	( )											13	( )
Harbor tugs.....					27	( )											44	( )
Total.....	125	477,150	134	504,350	29	2,500											571	1,885,250



TABLE IX.—Active program, by type of ship.

Type.	Num-ber.	Dead-weight tons.	Type.	Num-ber.	Dead-weight tons.
<b>Cargo:</b>			<b>Refrigerator:</b>		
Requisitioned (steel).....	300	1,929,739	Requisitioned (steel).....	11	86,200
Contract (steel).....	1,120	7,579,495	Contract (steel).....	8	75,200
Contract (wood).....	304	1,121,350	<b>Total.....</b>	<b>19</b>	<b>161,400</b>
Contract (composite).....	18	63,000			
Contract (concrete).....	4	13,500	<b>Collier:</b>		
<b>Total.....</b>	<b>1,746</b>	<b>10,707,084</b>	Requisitioned (steel).....	9	70,350
<b>Finished hull cargo:</b>			<b>Barge:</b>		
Contract (wood).....	115	447,700	Contract (steel).....	6	22,200
			Contract (wood).....	28	71,000
			Converted.....	56	206,000
<b>Tanker:</b>			<b>Total.....</b>	<b>90</b>	<b>299,200</b>
Requisitioned (steel).....	53	519,030			
Contract (steel).....	85	844,000	<b>Sailing vessel:</b>		
Contract (concrete).....	8	60,000	Contract (wood).....	10	34,500
Contract (wood).....	1	4,700	<b>Ocean tug:</b>		
<b>Total.....</b>	<b>147</b>	<b>1,427,730</b>	Contract (steel).....	46	.....
			Contract (wood).....	13	.....
<b>Passenger and cargo:</b>			<b>Total.....</b>	<b>59</b>	.....
Requisitioned (steel).....	2	9,972			
Contract (steel).....	26	338,000	<b>Harbor tug:</b>		
<b>Total.....</b>	<b>28</b>	<b>347,972</b>	Contract (steel).....	8	.....
			Contract (wood).....	62	.....
<b>Transport:</b>			<b>Total.....</b>	<b>70</b>	.....
Requisitioned (steel).....	9	71,975			
Contract (steel).....	13	107,800	<b>Grand total.....</b>	<b>2,315</b>	<b>13,675,711</b>
<b>Total.....</b>	<b>22</b>	<b>179,775</b>			

TABLE X.—Active program, by class of construction.

Class.	Num-ber.	Dead-weight tons.	Class.	Num-ber.	Dead-weight tons.
<b>Requisitioned (steel):</b>			<b>Contract (wood):</b>		
Cargo.....	300	1,929,739	Cargo (wood).....	304	1,121,350
Tanker.....	53	519,030	Cargo (composite).....	18	63,000
Refrigerator.....	11	86,200	Finished hull (wood).....	115	447,700
Transport.....	9	71,975	Sailing vessel.....	10	34,500
Collier.....	9	70,350	Barge (converted).....	56	206,000
Passenger and cargo.....	2	9,972	Barge.....	28	71,000
<b>Total.....</b>	<b>384</b>	<b>2,687,266</b>	Tug (ocean).....	13	.....
			Tug (harbor).....	62	.....
<b>Contract (steel):</b>			Tanker.....	1	4,700
Cargo (United States).....	1,086	7,296,205	<b>Total.....</b>	<b>607</b>	<b>1,948,250</b>
Cargo (Japan).....	30	243,290			
Cargo (China).....	4	40,000	<b>Contract (concrete):</b>		
Tanker.....	73	713,000	Cargo.....	4	13,500
Tanker (Navy).....	12	131,000	Tanker.....	8	60,000
Refrigerator.....	8	75,200	<b>Total.....</b>	<b>12</b>	<b>73,500</b>
Transport.....	13	107,800			
Passenger and cargo.....	26	338,000	<b>Grand total.....</b>	<b>2,315</b>	<b>13,675,711</b>
Barge.....	6	22,200			
Tug (ocean).....	46	.....			
Tug (harbor).....	8	.....			
<b>Total.....</b>	<b>1,312</b>	<b>8,966,695</b>			

TABLE XI.—*Accumulated program of ship construction.*  
 [Including construction in foreign yards.]

	Original program.		Canceled.		Suspension.		Total under suspension or canceled.		Active program.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
<b>REQUISITIONED, STEEL.</b>										
Cargo.....	313	2,000,339	13	70,600	.....	.....	13	70,600	300	1,929,739
Cargo (released).....	6	57,800	6	57,800	.....	.....	6	57,800	.....	.....
Cargo (to contract).....	12	110,900	12	110,900	.....	.....	12	110,900	.....	.....
Tanker.....	60	582,530	7	63,500	.....	.....	7	63,500	53	519,030
Tanker (released).....	1	6,980	1	6,980	.....	.....	1	6,980	.....	.....
Refrigerator.....	11	86,200	.....	.....	.....	.....	.....	.....	11	86,200
Transport.....	9	71,975	.....	.....	.....	.....	.....	.....	9	71,975
Collier.....	9	70,350	.....	.....	.....	.....	.....	.....	9	70,350
Passenger and cargo.....	4	18,972	2	9,000	.....	.....	2	9,000	2	9,972
Ore carrier (released).....	6	68,260	6	68,260	.....	.....	6	68,260	.....	.....
Total.....	431	3,074,306	47	387,040	.....	.....	47	387,040	384	2,687,266
Less to contract.....	12	110,900	12	110,900	.....	.....	12	110,900	.....	.....
Net total.....	419	2,963,406	35	276,140	.....	.....	35	276,140	384	2,687,266
<b>CONTRACT, STEEL.</b>										
Cargo (United States).....	1,306	8,948,780	218	1,644,475	2	8,100	200	1,652,575	1,086	7,296,205
Cargo (Japan).....	30	243,290	.....	.....	.....	.....	.....	.....	30	243,290
Cargo (China).....	4	40,000	.....	.....	.....	.....	.....	.....	4	40,000
Cargo (United States experimental).....	32	254,800	32	254,800	.....	.....	32	254,800	.....	.....
Tanker.....	102	976,600	29	263,600	.....	.....	29	263,600	73	713,000
Tanker (Navy).....	12	131,000	.....	.....	.....	.....	.....	.....	12	131,000
Refrigerator.....	8	75,200	.....	.....	.....	.....	.....	.....	8	75,200
Transport.....	91	831,800	78	724,000	.....	.....	78	724,000	13	107,800
Passenger and cargo.....	26	338,000	.....	.....	.....	.....	.....	.....	26	338,000
Barge.....	16	49,200	10	27,000	.....	.....	10	27,000	6	22,200
Tug (ocean).....	104	( <sup>1</sup> )	58	( <sup>1</sup> )	.....	.....	58	( <sup>1</sup> )	46	( <sup>1</sup> )
Tug (harbor).....	8	( <sup>1</sup> )	.....	.....	.....	.....	.....	.....	8	( <sup>1</sup> )
Total.....	1,739	11,888,670	425	2,913,875	2	8,100	427	2,921,975	1,312	8,966,695
<b>CONTRACT, WOOD.</b>										
<i>(According to original design.)</i>										
Cargo.....	521	1,939,050	217	817,700	.....	.....	217	817,700	304	1,121,350
Barge.....	141	368,500	113	297,500	.....	.....	113	297,500	28	71,000
Tug (ocean).....	61	( <sup>1</sup> )	48	( <sup>1</sup> )	.....	.....	48	( <sup>1</sup> )	13	( <sup>1</sup> )
Tug (harbor).....	100	( <sup>1</sup> )	38	( <sup>1</sup> )	.....	.....	38	( <sup>1</sup> )	62	( <sup>1</sup> )
Subtotal.....	823	2,307,550	416	1,115,200	.....	.....	416	1,115,200	407	1,192,350
<i>(According to altered design.)</i>										
Tanker.....	1	4,700	.....	.....	.....	.....	.....	.....	1	4,700
Finished hull.....	119	463,550	4	15,850	.....	.....	4	15,850	115	447,700
Sailing vessel.....	10	34,500	.....	.....	.....	.....	.....	.....	10	34,500
Barge (converted).....	64	241,900	8	35,900	.....	.....	8	35,900	56	206,000
Subtotal.....	194	744,650	12	51,750	.....	.....	12	51,750	182	692,900
Total.....	1,017	3,052,200	428	1,166,950	.....	.....	428	1,166,950	589	1,885,250
<b>CONTRACT, COMPOSITE.</b>										
Cargo.....	50	175,000	32	112,000	.....	.....	32	112,000	18	63,000
<b>CONTRACT, CONCRETE.</b>										
Cargo.....	7	32,000	3	18,500	.....	.....	3	18,500	4	13,500
Tanker.....	36	270,000	28	210,000	.....	.....	28	210,000	8	60,000
Total.....	43	302,000	31	228,500	.....	.....	31	228,500	12	73,500
Grand total.....	3,268	18,381,276	951	4,697,465	2	8,100	953	4,705,563	2,315	13,675,711

<sup>1</sup> No tonnage given on tugs.

218 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE XII.—Accumulated program of ship construction, by geographical sections of the United States.

Section of country and class of construction.	Accumulated program, United States.		Canceled.		Under suspension.		Total canceled and under supervision.		Active program.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
<b>ATLANTIC COAST.</b>										
Requisition steel.....	211	1,697,826	28	211,360	.....	.....	28	211,360	183	1,486,466
Contract steel.....	740	5,248,380	226	1,453,375	.....	.....	226	1,453,375	514	3,795,005
Contract wood.....	364	858,800	187	399,750	.....	.....	187	399,750	177	454,050
Contract composite.....	24	84,000	14	49,000	.....	.....	14	49,000	10	35,000
Contract concrete.....	19	122,000	13	93,500	.....	.....	13	93,500	6	28,500
<b>Total.....</b>	<b>1,358</b>	<b>8,006,006</b>	<b>468</b>	<b>2,206,985</b>	.....	.....	<b>468</b>	<b>2,206,985</b>	<b>890</b>	<b>5,799,021</b>
<b>GULF COAST.</b>										
Requisition steel.....	2	7,000	.....	.....	.....	.....	.....	.....	2	7,000
Contract steel.....	90	575,000	42	251,000	.....	.....	42	251,000	48	324,000
Contract wood.....	222	790,400	129	450,150	.....	.....	129	450,150	93	340,250
Contract composite.....	26	91,000	18	63,000	.....	.....	18	63,000	8	28,000
Contract concrete.....	8	60,000	6	45,000	.....	.....	6	45,000	2	15,000
<b>Total.....</b>	<b>348</b>	<b>1,523,400</b>	<b>195</b>	<b>809,150</b>	.....	.....	<b>195</b>	<b>809,150</b>	<b>153</b>	<b>714,250</b>
<b>PACIFIC COAST.</b>										
Requisition steel.....	101	876,600	1	10,000	.....	.....	1	10,000	100	866,600
Contract steel.....	489	4,428,950	122	1,156,850	.....	.....	122	1,156,850	367	3,269,100
Contract wood.....	378	1,405,500	90	317,050	.....	.....	90	317,050	288	1,088,450
Contract concrete.....	16	120,000	12	90,000	.....	.....	12	90,000	4	30,000
<b>Total.....</b>	<b>984</b>	<b>6,828,050</b>	<b>225</b>	<b>1,573,900</b>	.....	.....	<b>225</b>	<b>1,573,900</b>	<b>759</b>	<b>5,254,150</b>
<b>GREAT LAKES.</b>										
Requisition steel.....	105	381,980	6	54,780	.....	.....	6	54,780	99	327,200
Contract steel.....	386	1,356,050	35	52,650	2	8,100	37	60,750	349	1,285,300
Contract wood.....	53	2,500	22	A.	.....	.....	22	A.	31	2,500
<b>Total.....</b>	<b>544</b>	<b>1,740,530</b>	<b>63</b>	<b>107,430</b>	<b>2</b>	<b>8,100</b>	<b>65</b>	<b>115,530</b>	<b>479</b>	<b>1,625,000</b>
<b>ENTIRE COUNTRY.</b>										
Requisition steel.....	419	2,963,406	35	276,140	.....	.....	35	276,140	384	2,687,266
Contract steel.....	1,705	11,606,380	425	2,913,875	2	8,100	427	2,921,975	1,278	8,683,405
Contract wood.....	1,017	3,052,200	428	1,166,950	.....	.....	428	1,166,950	589	1,885,250
Contract composite.....	50	175,000	32	112,000	.....	.....	32	112,000	18	63,000
Contract concrete.....	43	302,000	31	228,500	.....	.....	31	228,500	12	73,500
<b>Grand total.....</b>	<b>3,224</b>	<b>18,097,986</b>	<b>951</b>	<b>4,697,465</b>	<b>2</b>	<b>8,100</b>	<b>953</b>	<b>4,705,565</b>	<b>2,281</b>	<b>13,392,421</b>



TABLE XIII.—Estimated deliveries, by months (all classes), to complete the ship-construction program.

Month.	Contract, steel.		Requisitioned, steel.		Contract, wood.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Delivered to June 30, 1920.....	1,101	7,051,445	374	2,594,166	571	1,885,250
1920.						
July.....	36	300,075	3	25,800	7	
August.....	32	246,475			8	
September.....	32	275,000	3	27,400	3	
October.....	24	205,000	4	39,900		
November.....	24	204,400				
December.....	12	119,950				
1921.						
January.....	7	73,900				
February.....	10	105,550				
March.....	5	56,000				
April.....	4	45,600				
May.....	6	64,200				
June.....	7	79,300				
July.....	3	32,100				
August.....	5	55,700				
October.....	1	13,000				
December.....	1	13,000				
1922.						
March.....	1	13,000				
May.....	1	13,000				
Grand total, active program.....	1,312	8,966,695	384	2,687,266	589	1,885,250

Month.	Contract, composite.		Contract, concrete.		Total.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.	Number.	Dead-weight tons.
Delivered to June 30, 1920.....	18	63,000	6	28,500	2,070	11,622,361
1920.						
July.....					46	325,875
August.....			4	30,000	44	276,475
September.....			1	7,500	39	309,900
October.....					28	244,900
November.....			1	7,500	25	211,900
December.....					12	119,950
1921.						
January.....					7	73,900
February.....					10	105,550
March.....					5	56,000
April.....					4	45,600
May.....					6	64,200
June.....					7	79,300
July.....					3	32,100
August.....					5	55,700
October.....					1	13,000
December.....					1	13,000
1922.						
March.....					1	13,000
May.....					1	13,000
Grand total active program.....	18	63,000	12	73,500	2,315	13,675,711

TABLE XIV.—Steel shipyards which have completed ship construction for Emergency Fleet Corporation.

Builder and location.	Program.				Canceled.			
	Requisitioned.		Contract.		Requisitioned.		Contract.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
Tampa Shipbuilding & Engineering Co., Tampa, Fla.	2	7,000						
Staten Island Shipbuilding Co., Port Richmond, N. Y.	5	17,500						
Albina Engineering & Machine Works (Inc.), Portland, Oreg.	6	21,800	13	48,100			2	7,400
American Shipbuilding Co., The, Buffalo, N. Y.				9	34,400			
American Shipbuilding Co., The, Superior, Wis.	4	12,400	18	70,800				
American Shipbuilding Co., The, Cleveland, Ohio.	5	15,700	25	97,150	1	3,300		
Downey Shipbuilding Co., Richmond Borough, New York City.			10	75,000				
Skinner & Eddy Corporation, yard No. 1, Seattle, Wash.	8	70,600	50	464,000			12	115,200
Whitney Bros. Co., Superior, Wis.			10	( <sup>1</sup> )				
Bethlehem Shipbuilding Corporation (Fore River), Quincy, Mass.	9	97,850	6	54,600				
Skinner & Eddy Corporation, Seattle, Wash.	5	40,500	32	302,600			13	124,800
Seattle Northern Pacific Shipbuilding Co., Seattle, Wash.			10	94,000				
Texas Steamship Co., Bath, Me.	13	120,300			5	43,300		
Columbia River Shipbuilding Corporation, Portland, Oreg.	10	88,000	28	246,400	6	52,800	2	17,600
Federal Shipbuilding Co., Kearney, N. J.			30	288,000				
Great Lakes Engineering Works, Ecorse, Mich.	21	84,900	38	153,650	1	13,000		
Ames Shipbuilding & Dry Dock Co., Seattle, Wash.	13	113,900	14	123,200			2	17,600
Great Lakes Engineering Works, Ashtabula, Ohio.	10	34,400	16	64,450				
Sun Shipbuilding Co., Chester, Pa.	16	179,600	12	124,800	2	20,200	8	84,800
American Shipbuilding Co., The, Lorain, Ohio.	13	66,380	42	167,300	4	38,480		
American Shipbuilding Co., The, Detroit, Mich.	12	39,200	59	234,450				
Northwest Engineering Works, Green Bay, Wis.			2	( <sup>2</sup> )			9	( <sup>1</sup> )
Do.			15	( <sup>1</sup> )				
American Shipbuilding Co., The, Chicago, Ill.	4	12,400	23	89,700				
Johnson Iron Works (Ltd.), The, New Orleans, La.			6	( <sup>2</sup> )				
McDougall-Duluth Co., Duluth, Minn.	9	28,300	25	95,750				
J. F. Duthie & Co., Seattle, Wash.	12	105,600	15	132,000			3	26,400
Merrill-Stevens Shipbuilding Corporation, Jacksonville, Fla.	1	6,000	21	119,300			17	95,300
Submarine Boat Corporation, Newark, N. J.			150	761,250			32	162,400
Standard Shipbuilding Corporation, Shooters Island, N. Y.	13	94,900	10	74,330				
Globe Shipbuilding Co., Superior, Wis.	4	14,000	16	61,500			1	4,050
Bethlehem Shipbuilding Corporation (Moore), Elizabethport, N. J.	3	11,800	2	10,200				
Do.			33	( <sup>1</sup> )			13	( <sup>1</sup> )
JAPANESE CONTRACTORS.								
Asano, Tsurumi, Japan.			2	25,200				
Mitsubishi, Nagasaki, Japan.			2	16,720				
Yokohama, Yokohama, Japan.			3	18,000				
Kawasaki, Kobe, Japan.			5	45,000				
Ishikawajima, Tokio, Japan.			2	10,000				
Uchida, Kanagawa, Japan.			2	16,720				
Osaka, Osaka, Japan.			4	40,000				
Grand total.	198	1,283,030	760	4,159,470	19	171,080	114	655,550

<sup>1</sup> Ocean-going tugs.

<sup>2</sup> Harbor tugs.

TABLE XIV.—Steel shipyards which have completed ship construction for Emergency Fleet Corporation—Continued.

Builder and location.	Delivered.				Total delivered, requisitioned and contract.		Date of final delivery.
	Requisitioned		Contract.		Number.	Dead-weight tons.	
	Number.	Dead-weight tons.	Number.	Dead-weight tons.			
Tampa Shipbuilding & Engineering Co., Tampa, Fla.	2	7,000	.....	.....	2	7,000	Mar. 3, 1919
Staten Island Shipbuilding Co., Port Richmond, N. Y.	5	17,500	.....	.....	5	17,500	June 17, 1919
Albina Engineering & Machine Works (Inc.), Portland, Oreg.	6	21,800	11	40,700	17	62,500	Aug. 19, 1919
American Shipbuilding Co., The, Buffalo, N. Y.	.....	.....	9	34,400	9	34,400	Sept. 27, 1919
American Shipbuilding Co., The, Superior, Wis.	4	12,400	18	70,800	22	83,200	Oct. 17, 1919
American Shipbuilding Co., The, Cleveland, Ohio	4	12,400	25	97,150	29	109,550	Nov. 19, 1919
Downey Shipbuilding Co., Richmond Borough, New York City	.....	.....	10	75,000	10	75,000	Nov. 28, 1919
Skinner & Eddy Corporation, yard No. 1, Seattle, Wash.	8	70,600	38	348,800	46	419,400	Dec. 9, 1919
Whitney Bros. Co., Superior, Wis.	.....	.....	10	( <sup>1</sup> )	10	( <sup>1</sup> )	Dec. 10, 1919
Bethlehem Shipbuilding Corporation (Fore River), Quincy, Mass.	9	97,850	6	54,600	15	152,450	Dec. 22, 1919
Skinner & Eddy Corporation, Seattle, Wash.	5	40,600	19	177,800	24	218,300	Dec. 24, 1919
Seattle Northern Pacific Shipbuilding Co., Seattle, Wash.	.....	.....	10	94,000	10	94,000	Dec. 30, 1919
Texas Steamship Co., Bath, Me.	8	77,000	.....	.....	8	77,000	Jan. 1, 1920
Columbia River Shipbuilding Corporation, Portland, Oreg.	4	35,200	26	228,800	30	264,000	Jan. 5, 1920
Federal Shipbuilding Co., Kearney, N. J.	.....	.....	30	288,000	30	288,000	Jan. 8, 1920
Great Lakes Engineering Works, Ecorse, Mich.	20	71,900	88	153,650	58	225,550	Do.
Ames Shipbuilding & Dry Dock Co., Seattle, Wash.	13	113,900	12	105,600	25	219,500	Mar. 15, 1920
Great Lakes Engineering Works, Ash-tabula, Ohio	10	34,400	16	64,450	26	98,850	Mar. 16, 1920
Sun Shipbuilding Co., Chester, Pa.	14	159,400	4	40,000	18	199,400	Mar. 22, 1920
American Shipbuilding Co., The, Lorain, Ohio	9	27,900	42	167,300	51	195,200	Apr. 15, 1920
American Shipbuilding Co., The, Detroit, Mich.	12	39,200	59	234,450	71	273,650	Apr. 17, 1920
Northwest Engineering Works, Green Bay, Wis.	.....	.....	2	( <sup>2</sup> )	2	( <sup>2</sup> )	Apr. 22, 1920
Do.	.....	.....	6	( <sup>1</sup> )	6	( <sup>1</sup> )	Do.
American Shipbuilding Co., The, Chicago, Ill.	4	12,400	23	89,700	27	102,100	Apr. 30, 1920
Johnson Iron Works (Ltd.), The, New Orleans, La.	.....	.....	6	( <sup>2</sup> )	6	( <sup>2</sup> )	May 1, 1920
McDougall-Duluth Co., Duluth, Minn.	9	28,300	25	95,750	34	124,050	May 8, 1920
J. F. Duthie & Co., Seattle, Wash.	12	105,600	12	105,600	24	211,200	May 24, 1920
Merrill-Stevens Shipbuilding Corporation, Jacksonville, Fla.	1	6,000	4	24,000	5	30,000	May 29, 1920
Submarine Boat Corporation, Newark, N. J.	.....	.....	118	598,850	118	598,850	June 11, 1920
Standard Shipbuilding Corporation, Shooters Island, N. Y.	13	94,900	10	74,330	23	169,230	June 25, 1920
Globe Shipbuilding Co., Superior, Wis.	4	14,000	15	57,450	19	71,450	June 29, 1920
Bethlehem Shipbuilding Corporation (Moore), Elizabethport, N. J.	3	11,800	2	10,200	5	22,000	Do.
Do.	.....	.....	20	( <sup>1</sup> )	20	( <sup>1</sup> )	Do.
<b>JAPANESE CONTRACTORS.</b>							
Asano, Tsurumi, Japan	.....	.....	2	25,200	2	25,200	Feb. 14, 1920
Mitsubishi, Nagasaki, Japan	.....	.....	2	16,720	2	16,720	Mar. 19, 1920
Yokohama, Yokohama, Japan	.....	.....	3	18,900	3	18,900	Apr. 16, 1920
Kawasaki, Kobe, Japan	.....	.....	5	45,000	5	45,000	Apr. 23, 1920
Ishikawajima, Tokio, Japan	.....	.....	2	10,000	2	10,000	May 1, 1920
Uchida, Kanagawa, Japan	.....	.....	2	16,720	2	16,720	May 18, 1920
Osaka, Osaka, Japan	.....	.....	4	40,000	4	40,000	May 26, 1920
Grand total	179	1,111,950	646	3,503,920	825	4,615,870	

<sup>1</sup> Ocean-going tugs.

<sup>2</sup> Harbor tugs.

TABLE VIII.—Summary of deliveries arranged according to the States in which shipyards are located.

Class of construction.	Maine.		New Hampshire.		Massachusetts.		Connecticut.		New York.		New Jersey.		Pennsylvania.		Delaware.		Maryland.		Virginia.		
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	
<b>REQUESTIONED, STEEL.</b>																					
Cargo.....	4	39,000			7	79,650			15	90,500	19	174,050	21	198,370	19	70,100	11	76,300	5	35,480	
Tanker.....	4	38,000			2	18,200			3	21,900	12	100,320	12	117,000	4	36,110	2	16,350	4	52,450	
Refrigerator.....											6	70,350	2	28,200			6	41,100			
Collier.....											6	34,475	2	37,500							
Passenger.....																					
Passenger and cargo.....											6	34,475	2	37,500							
Total.....	8	77,000			9	97,850			18	112,400	46	379,195	40	384,061	23	115,210	19	133,750	9	87,910	
<b>CONTRACT, STEEL.</b>																					
Cargo.....																					
Tanker.....			7	61,600				6	52,800	39	273,730	152	918,975	121	985,500	5	25,500	12	100,000	7	65,800
Navy tanker.....					6	54,600							3	30,000	5	37,500	14	133,800	6	68,250	
Ocean tugs.....										7	(1)	20	(1)								
Total.....			7	61,600	6	54,600		6	52,800	46	273,730	172	918,975	124	985,500	10	63,000	26	233,800	13	134,050
<b>WOOD.</b>																					
Cargo.....	11	38,500	8	28,000				5	17,500	2	7,000	9	31,500	8	28,000			2	7,000		
Barge.....	10	26,000			1	2,500			1	2,500								7	17,500		
Finished hull.....	8	30,800	2	7,700				8	30,800	3	11,540	1	3,850					2	7,700	3	11,550
Converted barge.....			5	18,750				2	7,500	2	5,150							2	7,500	3	10,650
Ocean tugs.....					5	(1)													5	(1)	
Harbor tugs.....										9	(1)	1	(1)						6	(1)	
Total.....	29	95,300	15	54,450	6	2,500		15	55,800	17	26,200	11	35,350	8	28,000	1	(1)	24	39,700	6	22,200
<b>CONCRETE.</b>																					
Cargo.....										1	3,500										
Total.....										1	3,500										
Grand total.....	37	172,300	22	116,050	21	154,950		21	108,600	82	415,830	223	1,353,520	172	1,367,551	34	178,210	69	467,250	28	244,160

Class of construction.	North Carolina.		Georgia.		Florida.		Alabama.		Mississippi.		Louisiana.		Tennessee.		Texas.		California.		
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	
<b>REQUISITIONED, STEEL.</b>																			
Cargo.....						3	13,000										20	180,900	
Tankers.....																	10	112,600	
Total.....						3	13,000										30	294,500	
<b>CONTRACT, STEEL.</b>																			
Cargo.....	4	38,400																	
Tankers.....																			
Refrigerator						16	134,500	4	20,000										
Transport.....																			
Barge.....								1	7,500										
Harbor tugs.....												6	(1)	2	3,600			1	11,800
Total.....	4	38,400	16	134,500	5	27,500					6	(1)	2	3,600			121	1,097,450	
<b>WOOD.</b>																			
Cargo.....																			
Tanker.....																			
Barge.....																			
Finished hull.																			
Converted barge.	2	7,700																	
Sailing vessel hulls.																			
Ocean tugs.....																			
Total.....	2	7,700	11	31,800	22	75,300	2	7,000	12	42,700	14	47,750			59	222,550	29	106,950	
<b>COMPOSITE.</b>																			
Cargo.....																			
Tanker.....																			
Total.....																			
<b>CONCRETE.</b>																			
Cargo.....	2	7,000																	
Tankers.....																			
Total.....	2	7,000	1	3,000				2	15,000										
Grand total.....	8	53,100	18	55,800	45	236,800	15	70,500	12	42,700	22	84,750	2	3,600	59	222,550	180	1,498,900	

TABLE VIII.—Summary of deliveries arranged according to the States in which shipyards are located—Continued.

Class of construction.	Oregon.		Washington.		Wisconsin.		Michigan.		Ohio.		Illinois.		Minnesota.		Japan.		Total.	
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.
<b>REQUIREMENTED, STEEL.</b>																		
Cargo.....	26	189,000	42	356,100	21	71,400	32	111,100	33	104,000	4	12,400	9	28,300	290	1,836,639	63	519,030
Tankers.....			3	27,000											11	86,200	9	70,350
Refrigerator.....															9	71,975	2	9,972
Collier.....																		
Transport.....																		
Passenger and cargo.....																		
Total.....	26	189,000	45	383,100	21	71,400	32	111,100	33	104,000	4	12,400	9	28,300	374	2,594,166		
<b>CONTRACT, STEEL.</b>																		
Cargo.....	57	445,500	122	1,087,400	53	203,400	110	494,150	104	409,550	23	89,700	25	95,750	988	6,468,095	41	337,000
Tankers.....															9	98,250	8	75,200
Navy tankers.....															1	11,800	3	11,100
Refrigerator.....															43	(1)	8	(1)
Transport.....																		
Barge.....																		
Ocean tugs.....																		
Harbor tugs.....																		
Total.....	57	445,500	122	1,087,400	71	203,400	110	494,150	104	409,550	23	89,700	25	95,750	1,101	7,051,445		
<b>WOOD.</b>																		
Cargo.....	98	371,500	85	313,150	1	2,500									304	1,121,350	1	4,700
Tanker.....															28	71,000	115	447,700
Barge.....	16	62,500	38	160,350											66	206,000	10	34,500
Finished hull.....	9	34,500	11	40,850											13	(1)	44	(1)
Converted barge.....	2	8,500																
Sailing vessel hull.....																		
Ocean tugs.....																		
Harbor tugs.....																		
Total.....	126	477,150	134	504,350	29	2,500									571	1,885,250		



TABLE XVI.—Summary of cancellations arranged according to the States in which shipyards are located—Continued.

	Tennessee.		Texas.		California.		Oregon.		Washington.		Wisconsin.		Michigan.		Ohio.		Total.		
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	
<b>REQUIREMENTED, STEEL.</b>																			
Cargo.....																			
Tanker.....					5	57,300	6	52,800				1	3,400	1	13,000	4	34,800	31	289,300
Passenger and cargo.....																1	6,980	8	70,480
Ore carrier.....																		2	9,000
Total.....					5	57,300	6	52,800				1	3,400	1	13,000	5	41,780	6	85,260
<b>CONTRACT, STEEL.</b>																			
Cargo.....																			
Tanker.....					32	282,650	10	77,800	57	506,400	6	24,300	6	24,300	1	4,050		250	1,899,275
Transport.....					3	30,000												29	283,600
Barge.....	4	7,200			20	260,000												78	724,000
Ocean tug.....																		10	27,000
Total.....	4	7,200			55	572,650	10	77,800	57	506,400	15	24,300	16	24,300	4	4,050		425	2,913,875
<b>CONTRACT, WOOD.</b>																			
Cargo.....																			
Barge.....					45	181,500	34	124,000	33	129,100								217	817,700
Finished hull.....					21	86,500			2	7,000								113	297,500
Coal barge.....									1	4,300								4	15,850
Ocean tug.....									5	24,650								8	65,900
Harbor tug.....					7	( <sup>1</sup> )												48	( <sup>1</sup> )
Total.....					66	268,000	34	124,000	41	165,050	10	( <sup>1</sup> )	12	( <sup>1</sup> )				428	1,186,950
<b>COMPOSITE.</b>																			
Cargo.....																			
Concrete.....																			
Total.....																			
<b>CONCRETE.</b>																			
Cargo.....																			
Tanker.....					1	7,500													
Total.....					11	82,500													
Total.....					12	90,000													
Grand total.....	4	7,200	66	268,000	87	747,650	50	264,600	98	671,450	26	27,700	29	37,300	9	45,830	1,963	14,808,365	

<sup>1</sup> No tonnage assigned to tugs. <sup>2</sup> 12 of these vessels, having a dead-weight tonnage of 110,900, were changed from requisitioned to contract.



TABLE XVII.—Status of contract steel 13,000 dead-weight-ton passenger and cargo vessels.

Builder and location.	Contract No.	Hull No.	Name.	Dimensions.			Construction.	Engines.	Speed.	Boilers.	Cruising radius.	Passenger capacity.		Keels laid.	Launched.
				Length between perpendiculars.	Molded breadth.	Molded depth.						First class.	Third class.		
New York Shipbuilding Corporation, Camden, N. J.	151	1012	Wenatches.....	518	72	50	Ish....	West. 2 C. C. G. turb., 12,000 S. H. P.	17½	8 B. & W. water tube.	11,700	260	300	June 15, 1918	May 24, 1919
		1013	Sea Girt.....											Oct. 8, 1918	July 20, 1919
		1014	American Legion											Jan. 21, 1919	Oct. 11, 1919
		2585	Old North State											Mar. 20, 1919	Feb. 20, 1920
		2586	Croole State.....											May 22, 1919	Apr. 27, 1920
		2587	Granite State.....											.....do.1.....	July 1, 1920
		418	2588	Panhandle State	502	62	42	Trans.	2 quad. recip. 7,000 I. H. P.	15	6 Scotch.....	15,000	78	.....do.1.....	May 9, 1920
		2589	Wolverine State											.....do.1.....	Sept. 1, 1920
		2590	Centennial State											Oct. 1, 1919	Aug. 1, 1920
		2591	Blue Hen State...											Mar. 4, 1920	Nov. 1, 1920
		2583	Bay State.....											Oct. 15, 1919	July 1, 1920
		2584	Peninsula State...											July 1, 1920	Mar. 1, 1921
	Bethlehem Shipbuilding Corporation, Sparrows Point, Md.	420	2579	Keystone State...	518	72	50	Ish....	Beth. C. C. G. turb., 12,000 S. H. P.	17½	8 B. & W. water-tube.	14,000	260	300	May 13, 1919
		2580	Empire State....											.....do.1.....	July 1, 1920
		2581	Lone Star State...											.....do.1.....	Nov. 1, 1920
		2582	Hoosier State....											May 20, 1919	Sept. 1, 1920
		182	1164	Hawkeye State...	518	72	50	Ish....	2 Beth. C. C. G. turbines, 12,000 S. H. P.	17½	8 Yarrow water tube.	9,800	260	300	Aug. 29, 1918
Newport News Dry Dock & Shipbuilding Co., Newport News, Va.	403	2505	Pine Tree State...	518	72	50	Ish....	2 Newport News C. C. G. turbines, 12,000 S. H. P.	17½	8 B. & W. water-tube.	14,000	260	300	June 24, 1919	July 1, 1920
		2506	Palmetto State...											Feb. 21, 1919	Dec. 1, 1920
		2507	Nutmeg State....											July 1, 1920	Mar. 1, 1921
		2508	Sunflower State...											Dec. 1, 1920	Sept. 1, 1921
		2509	Blue-Cross State											Nov. 1, 1920	Aug. 1, 1921
	2510	Cotton State....											Dec. 1, 1920	Sept. 1, 1921	

1 Actual dates.

228 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE XVIII.—Dormitories and cafeterias constructed or planned for the Emergency Fleet Corporation.

	Men to be housed.	Men to be fed.	Cost of equipment.
Hog Island.....	2,000	2,000	\$204,729.97
Essington.....	600	600	34,750.97
St. Helena.....	1,050	1,848	85,868.22
Chester boarding house.....	144	144	11,223.06
Chester hotel and cafeteria.....	315	2,000	48,430.65
Port Jefferson (dormitories only).....	214	250	15,630.25
Groton (cafeteria only).....			5,667.35
Portsmouth, N. H.....	400	400	28,000.00
Bath, Me.....	148	148	1,942.79

TABLE XIX.—Schedule of housing projects, including charter of housing and number of men housed.

Shipyard.	Location.	Individual houses.		Apartments.		Dormitories.		Hotels.		Total number of men accommodated.
		Number.	Men accommodated.	Number.	Men accommodated.	Number.	Men accommodated.	Number.	Men accommodated.	
American International Shipbuilding Corporation (4 projects).	Hog Island, Philadelphia, Pa.	1,989	3,978			216	2,042			6,020
Newport News Shipbuilding & Dry Dock Co. (2 projects).	Newport News, Va.	473	946	330	421					1,367
New York Shipbuilding Co. (4 projects). <sup>1</sup>	Camden, N. J.	1,578	3,156	459	118			1	38	3,312
Bethlehem Shipbuilding Corporation.	(Sparrows Point, Md.	296	1,848							2,948
	St. Helena, <sup>2</sup>	529	1,058							
	Sparrows Point, Md.									
	Dundalk, <sup>3</sup>	2	42							
Atlantic Corporation.....	Portsmouth, N. H.	278	556			9	409			965
Sun Shipbuilding Co. (2 projects).	Chester, Pa...	712	1,442	56	112					1,554
Chester Shipbuilding Co. (2 projects). <sup>4</sup>	do.....	278	556	106	168			10	1	292
American Shipbuilding Co. <sup>5</sup>	Lorain, Ohio...	232	464	8	16					480
Texas Steamship Co.....	Bath, Me.....	109	218			4	72			290
Bethlehem Shipbuilding Co. and Pusey & Jones. <sup>6</sup>	Wilmington, Del.	503	1,006	7	14					1,020
Merchants' Shipbuilding Corporation.	Bristol, Pa....	320	640	212	388	18	56	2,300	1	450
Pusey & Jones. <sup>7</sup>	Gloucester, N. J.	447	894	1	2					896
Westinghouse Electric & Manufacturing Co. (2 projects).	Essington, Pa.	200	400			2	614			1,041

<sup>1</sup> 510 houses sold to individuals; balance en masse to syndicate.  
<sup>2</sup> Dormitories certified to supply and sales division and sold.  
<sup>3</sup> Capital stock of realty company taken over by Emergency Fleet Corporation Feb. 20, 1920.  
<sup>4</sup> Underneath the apartments are 6 stores on Collings Road and 3 in Morgan Village.  
<sup>5</sup> Convertible.  
<sup>6</sup> Sold as a whole.  
<sup>7</sup> Capital stock of realty company taken over by Emergency Fleet Corporation Jan. 15, 1920, and entire project sold to individual purchasers.  
<sup>8</sup> Boarding houses.  
<sup>9</sup> Capital stock of realty company taken over by Emergency Fleet Corporation May 25, 1920.  
<sup>10</sup> Hotel owned by Emergency Fleet Corporation.  
<sup>11</sup> Capital stock of realty company taken over by Emergency Fleet Corporation June 17, 1920.  
<sup>12</sup> Negotiations begun with officials of shipbuilding company in re transfer of capital stock of realty company to Emergency Fleet Corporation.  
<sup>13</sup> These are bachelor quarters and boarding houses.  
<sup>14</sup> Negotiations begun with officials of shipbuilding company in re transfer of capital stock of realty company to Emergency Fleet Corporation.  
<sup>15</sup> Women.

TABLE XIX.—Schedule of housing projects, including charter of housing and number of men housed—Continued.

Shipyard.	Location.	Individual houses.		Apartments.		Dormitories.		Hotels.		Total number of men accommodated.
		Num-ber.	Men accom-mo-dated.	Num-ber.	Men accom-mo-dated.	Num-ber.	Men accom-mo-dated.	Num-ber.	Men accom-mo-dated.	
Merrill Stevens Shipbuilding Co.	Jacksonville, Fla.	156	316	.....	.....	.....	.....	.....	.....	316
Bayles Shipyard (Inc.)...	Port Jefferson, Long Island.	16 9	18	.....	.....	1	206	.....	.....	224
G. M. Standifer Construction Co.	Vancouver, Wash.	17 20	40	.....	.....	.....	.....	1	500	540
Terry Shipbuilding Co. ...	Savannah, Ga.	(18)	.....	.....	.....	.....	.....	.....	.....	.....
Traylor Shipbuilding Co. .	Cornwell Heights, Pa.	Tents	300	.....	.....	.....	.....	.....	.....	300
Detroit Shipbuilding Co. <sup>19</sup>	Wyandotte, Mich.	20 79	158	.....	.....	.....	.....	.....	.....	158
Manitowoc Shipbuilding Co. <sup>21</sup>	Manitowoc, Wis.	100	200	.....	.....	1	300	.....	.....	500
Groton Iron Works <sup>22</sup> .....	Groton, Conn.	{ 22 92 # 3	{ 184 45	.....	.....	4	204	.....	.....	433
Newburgh Shipyards <sup>24</sup> ...	Newburgh, N. Y.	127	254	70	120	.....	.....	.....	.....	374
Pacific Coast Shipbuilding Co. <sup>25</sup>	Clyde, Calif. ...	103	206	.....	.....	.....	.....	1	150	356
Missouri Valley Bridge & Iron Co. <sup>26</sup>	Quantico, Va. .	27 12	24	.....	.....	.....	.....	.....	.....	24
Total houses.....	.....	8, 044	18, 862	849	1, 359	94	6, 174	5	1, 430	28, 064
Total boarding houses.	.....	6	289	.....	.....	.....	.....	.....	.....	.....

<sup>19</sup> Sold as a whole in conjunction with sale of Bayles Shipyard (Inc.) to New York Harbor & Dry Dock Co., Mar. 31, 1920.

<sup>17</sup> Cottages.

<sup>18</sup> Abandoned.

<sup>19</sup> Capital stock of realty company taken over by Emergency Fleet Corporation June 17, 1920.

<sup>20</sup> 1 old house included.

<sup>21</sup> Project sold as a whole to shipbuilding June 19, 1920.

<sup>22</sup> Capital stock of realty company taken over by Emergency Fleet Corporation Sept. 13, 1919.

<sup>23</sup> Of the 92 houses, 42 were constructed by the Emergency Fleet Corporation, and 50 houses and 2 boarding houses were under construction by the Groton Iron Works, 12 of which and 1 boarding house were completed by the Emergency Fleet Corporation, the balance having been completed by the Groton Iron Works. There are also 1 cafeteria and 1 boiler house.

<sup>24</sup> Negotiations begun with officials of shipbuilding company re purchase.

<sup>25</sup> Sales of houses to individual purchasers now in progress.

<sup>26</sup> Entire project sold as a whole to United States Marine Corps in conjunction with sale of shipyard by supply and sales division.

<sup>27</sup> Cottages.

Total number of persons in above projects: Houses, 43,459; apartments, 4,245; dormitories, 6,174; hotels, 1,430; total number, 55,308.

TABLE XX.—Loans made by the Emergency Fleet Corporation to utility companies in connection with housing projects.

Wilmington:		
Gas.....		\$30, 787. 79
Electricity.....		18, 807. 78
Gloucester:		
Gas.....		49, 520. 00
Electricity.....		36, 846. 45
Camden:		
Gas.....		159, 209. 25
Electricity.....		81, 202. 06
Lorain, electricity.....		15, 829. 23
St. Helena:		
Gas and electric installation.....		25, 580. 07
Water and sewer facilities (including Dundalk).....		150, 000. 00
Dundalk, gas, electricity.....		71, 339. 56
Hilton Village:		
Water.....		67, 130. 00
Electricity.....		23, 434. 36

230 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

Portsmouth, electricity.....	\$17, 837. 69
Chester, gas .....	99, 900. 24
Jacksonville, gas.....	26, 113. 21
Manitowoc, gas.....	10, 000. 00
Essington, water.....	15, 000. 00

TABLE XXI.—List of municipalities which have furnished facilities in connection with housing projects of the Emergency Fleet Corporation with their approximate commitments.

Wilmington, Del.....	\$160, 000. 00
Gloucester, N. J.....	200, 000. 00
Camden, N. J.....	273, 250. 00
Lorain, Ohio.....	72, 848. 52
Bath, Me. (including \$25,000 for school).....	125, 000. 00
Portsmouth, N. H.....	121, 700. 00
Chester, Pa.....	128, 863. 72
Manitowoc, Wis.....	47, 128. 43
Wyandotte, Mich.....	19, 879. 52
South Jacksonville, Fla.....	100, 000. 00
Duval County, Fla. (for road construction).....	15, 031. 49
Borough of Groton, Conn. (including \$2,000 for school site).....	27, 000. 00
Town of Groton, Conn.....	25, 000. 00
Warwick County, Va. (school at Hilton Village).....	40, 000. 00

TABLE XXII.—Statement of total commitments of housing developments up to Aug. 1, 1919.

Company.	Location.	Amount.
Atlantic Corporation.....	Portsmouth, N. H.....	\$2, 029, 977
Newport News Shipbuilding & Dry Dock Co.....	Newport News, Va. (2 projects).....	4, 880, 500
New York Shipbuilding Co.....	Camden, N. J. (4 projects).....	9, 525, 000
Pusey & Jones.....	Gloucester, N. J.....	3, 029, 500
Bethlehem Shipbuilding Co.....	Wilmington, Del.....	4, 800, 000
Pusey & Jones.....	Sparrows Point, Md. (2 projects).....	4, 534, 593
Bethlehem Shipbuilding Corporation.....	Bath, Me.....	1, 150, 000
Texas Steamship Co.....	Chester, Pa. (2 projects).....	3, 074, 796
Chester Shipbuilding Co.....	Bristol, Pa.....	5, 592, 790
Merchants Shipbuilding Corporation.....	Philadelphia, Pa. (4 projects).....	10, 031, 000
American International Shipbuilding Co.....	Chester, Pa. (2 projects).....	3, 560, 000
Sun Shipbuilding Co.....	Vancouver, Wash.....	400, 000
G. M. Standifer Construction Co.....	Port Jefferson, Long Island.....	300, 000
Bayles Shipyard (Inc.).....	Lorain, Ohio.....	1, 638, 500
American Shipbuilding Co.....	Jacksonville, Fla.....	876, 888
Merrill-Stevens Shipbuilding Co.....	Essington, Pa. (2 projects).....	1, 947, 118
Westinghouse Electric & Manufacturing Co.....	Savannah, Ga.....	21, 740
Terry Shipbuilding Co.....	Wyandotte, Mich.....	442, 250
Detroit Shipbuilding Co.....	Cornwell Heights, Pa.....	8, 800
Traylor Shipbuilding Co.....	Manitowoc, Wis.....	623, 298
Manitowoc Shipbuilding Co.....	Clyde, Calif.....	750, 000
Pacific Coast Shipbuilding Co.....	Groton, Conn.....	800, 000
Groton Iron Works.....	Newburgh, N. Y.....	1, 199, 541
Newburgh Shipyards.....	Quantico, Va.....	30, 000
Missouri Valley Bridge & Iron Co.....		
Total commitments.....		61, 246, 289
15 per cent reserve for contingency.....		9, 186, 942
Reserve for administration expenses, compensation in requisition, and guaranty of rentals.....		1, 500, 000
		71, 933, 231

STATEMENT OF RESERVE.

15 per cent reserve for contingencies, as above.....	\$9, 186, 942
Less commitment to New York Shipbuilding Co.....	\$1, 345, 000
Less commitment to American International Shipbuilding Co.....	36, 150
	1, 381, 150
15 per cent reserve for contingency.....	207, 172
	1, 588, 322
Balance in reserve.....	7, 596, 620
Projects approved.....	36
Projects on which preliminary plans have been submitted.....	34
Projects on which final plans have been approved.....	34
Projects on which construction has begun.....	34

TABLE XXIII.—*Details of housing contracts and expenditures.*

[Submitted in compliance with an act of Congress entitled "An act to authorize and empower the United States Shipping Board Emergency Fleet Corporation to purchase, lease, requisition, or otherwise acquire, and to sell or otherwise dispose of, improved or unimproved land, houses, buildings, and for other purposes," approved Mar. 1, 1918.]

LIST OF PERSONS OR CORPORATIONS WITH WHOM UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION HAS MADE CONTRACTS FOR HOUSING PROJECTS, WITH PARTICULARS AS TO EXPENDITURES, ETC.

HOG ISLAND.

Dormitories, Ninety-fourth and Tincum Streets:	
American International Shipbuilding Co.—	
Land.....	\$103,897.55 <sup>1</sup>
William Crawford (construction contract).....fee..	30,000.00
W. G. Cornell & Co. (heating).....do....	10,000.00
Owen Brainard (architect and engineer).....do....	12,000.00
Albert Pick & Co. (furnishings).....lump sum..	82,600.00
953 houses, Sixty-first and Sixty-seventh Streets and Elmwood Avenue, Philadelphia, Pa.:	
414 houses, H. P. Schneider—	
Land.....	153,941.43
H. P. Schneider (construction contract).....lump sum..	1,167,780.33
539 houses, Moss, Taylor & Crawford—	
Land.....	176,813.34
Moss, Taylor & Crawford (construction contract).....lump sum..	1,256,287.18
600 houses, Seventieth Street and Elmwood Avenue, Philadelphia, Pa.:	
Land.....	267,149.26
H. P. Schneider (construction contract).....lump sum..	1,885,000.00
Public utilities for all the above projects.....	388,983.45
(This amount has been loaned to the city of Philadelphia.)	

HILTON VILLAGE.

Newport News Shipbuilding & Dry Dock Co., Newport News, Va. (land purchased by realty company):	
Mellon-Stuart Co. (construction contract).....fee..	\$48,494.60
Blumenthal Kahn Electrical Co. (electric wiring and fixtures), lump sum.....	15,930.00
Field Barker & Underwood (paving, etc.) <sup>1</sup> .....unit prices..	112,121.00
Loan to the Newport News Light & Water Co. for water, etc.....	67,130.00
Loan to the Newport News & Hampton Railway, Gas & Electric Co. (electric service).....	23,434.36

CAMDEN, N. J.

(Yorkship, First Haller, Morgan Village, Fairview extension.)

New York Shipbuilding Co. (land purchased by realty company):	
Tidewater Building Co. (construction contract).....fee..	\$112,000.00
Miles-Tighe Co. (engineering contract, Yorkship).....do....	42,500.00
F. Sabin Co. (heating).....lump sum..	232,126.30
C. A. Kuehnle (painting).....do....	176,030.00
J. N. Knight Co. (plumbing, ranges, etc.).....do....	620,634.30
Schneider Sheet Metal Works (metal and sheet-metal work).....do....	178,063.00
L. K. Comstock (electric wiring and fixtures).....do....	99,470.00
E. D. Litchfield (architect).....fee..	27,000.00
I. Hicks & Son (planting).....lump sum..	50,000.00
Hugh Nawn Contracting Co. (street improvements).....do....	478,817.86
Lockwood, Greene & Co. (engineers, Fairview).....fee..	13,000.00
Mark Haller (construction contract, First Haller).....lump sum..	284,402.50
Mark Haller (construction contract, Morgan Village).....do....	304,540.00
Fieser, Pencz & Co. (stair work) <sup>1</sup> .....do....	52,410.75
Robert Graves Co. (decorating) <sup>1</sup> .....do....	40,241.75
Loans to city of Camden and to privately owned gas and electric companies for all public utilities for the above four projects, total.....	516,151.31

<sup>1</sup> These contracts were made to complete work originally included in general construction contracts but subsequently eliminated therefrom.

SPARROWS POINT, MD.

Bethlehem Shipbuilding Co., near Baltimore, Md.:

St. Helena—	
Land.....	\$33,750.88
Consolidated Engineering Co. (construction contract)..... fee..	32,726.00
Riggs, Distler & Stringer (plumbing, heating, and electricity), fee.....	10,000.00
Dundalk—	
Land purchased by realty company.	
Consolidated Engineering Co. (construction contract)..... fee..	45,774.00
H. E. Crook Co. (plumbing, heating, wiring, ranges, etc.)... do..	17,500.00
Gladfelter & Chambers (construction store building), lump sum <sup>1</sup> .....	73,721.25
J. W. DeWitt (papering and painting) <sup>1</sup> ..... lump sum <sup>1</sup> ..	19,228.00
Loans to the Consolidated Gas, Electric Light & Power Co. for gas and electricity (includes St. Helena).....	96,919.63
Loans to the Dundalk Co. for sewers and water (includes St. Helena)..	149,833.78

PORTSMOUTH, N. H.

Atlantic Corporation (land purchased by realty company):

National Engineering Corporation (construction contract)..... fee..	40,500.00
Kilham & Hopkins (architects)..... do.....	10,000.00
Eastern Power & Heating Co. (plumbing, heating, etc.) lump sum..	208,608.45
Loan to city of Portsmouth for public utilities, paving, water, sewerage, etc.....	121,700.00
Loan to privately owned electric company.....	17,837.69

NEWPORT NEWS, VA.

Newport News Shipbuilding & Dry Dock Co. (apartments) (land purchased by realty company):

James Stewart Co. (construction contract)..... fee..	32,000.00
United Electric Construction Co. (wiring)..... lump sum..	25,912.96
John Laura Co. (roofing)..... do.....	10,500.00
Wells Architectural Iron Co. (ironwork)..... do.....	61,353.00
Reliance Fireproof Door Co. (fireproof doors)..... do.....	10,892.00
Morris L. Ackers (painting)..... do.....	39,565.85
G. W. Binks (plastering)..... do.....	19,265.00
Henry Struble Cut Stone Co. (cut stone)..... do.....	15,550.00

CHESTER, PA.

Sun Shipbuilding Co.:

Sun Village and Sun Hill (land purchased by realty company)—	
Price & Johnston (construction contract)..... fee..	82,200.00
Rhodes Bros. (plumbing and ranges) <sup>1</sup> ..... unit prices..	186,992.20
Haney White Co. (millwork and stair material)..... do.....	35,758.12
Sabine & Co. (heating) <sup>1</sup> ..... do.....	132,266.00
Nicholson Electric Co. (electric wiring) <sup>1</sup> ..... do.....	25,560.66
Horn & Brennan (light fixtures) <sup>1</sup> ..... do.....	14,986.95
Stewart Iron Works Co. (fences) <sup>1</sup> ..... do.....	22,000.00
S. C. Trego (plastering and stucco work) <sup>1</sup> ..... do.....	55,547.00
American Paving Co. (street paving)..... do.....	140,008.48

Chester Shipbuilding Co.:

Buckman Village (land purchased by realty company)—	
McArthur Bros. (construction contract)..... fee..	58,000.00
Brumbaugh, Simon & Bassett (architects) (including Chester Hotel)..... fee..	10,000.00
Walter Purks & Mellon (plumbing, heating, and ranges) (including Chester Hotel)..... labor only..	11,000.00
O. H. Bauer (interior decorating and calcimining) (including Chester Hotel)..... lump sum..	28,277.00

<sup>1</sup> These contracts were made to complete work originally included in general construction contracts but subsequently eliminated therefrom.

Chester Shipbuilding Co.—Continued.

Chester Hotel—	
McArthur Bros. (construction contract).....fee..	\$18,000.00
J. S. Thorn Co. (skylight and vents).....lump sum..	10,895.00
William A. Wafer (marblework).....do....	11,100.00
Levering & Garrigues (structural steel, etc.).....do....	36,855.00
Chester Shipbuilding Co. (excavations, etc.).....do....	10,827.40
Chester Shipbuilding Co. (boilers).....do....	10,000.00
Chester Shipbuilding Co. (installation of steam pipe line), lump sum.....	16,274.13
Loan to city of Chester for public utilities, as per agreement.....	128,863.72
Loan to privately owned gas company.....	99,900.24

LORAIN, OHIO.

American Shipbuilding Co. (land purchased by realty company):	
Moreno Burkham (construction contract).....fee..	35,000.00
Koblitz Plumbing & Heating Co. (plumbing and heating), lump sum.....	95,550.14
A. S. Hecker Co. (street improvement) <sup>1</sup> .....lump sum..	52,980.00
H. Miller (planting and seeding) <sup>1</sup> .....do....	18,500.00
Loan to city of Lorain for public utilities and street improvements....	72,848.52
Loan to Lorain County Electric Co. (electric installation).....	15,829.23

BATH, ME.

Texas Steamship Co.:	
L. P. Soule & Son Co. (construction contract).....fee..	28,000.00
Litchfield & Prest (outfall sewer) <sup>1</sup> .....unit prices..	26,755.53
Small & Ingalls (street improvements) <sup>1</sup> .....do....	51,906.50
F. A. Rumery Co. (construction contract, school) <sup>1</sup> .....do....	36,613.30
Loan to city of Bath for public utilities and street improvements.....	125,000.00

UNION PARK GARDENS, WILMINGTON, DEL.

Bethlehem Shipbuilding Co. and Pusey & Jones (land purchased by realty company):	
Lynch Construction Co. (construction contract).....fee..	80,000.00
Ballinger & Perrott (architects and engineers).....do....	10,000.00
B. D. Wright (painting and decorating) <sup>1</sup> .....unit prices..	29,234.00
Shapiro & Aronson (light fixtures) <sup>1</sup> .....do....	13,610.60
Union Paving Co. (street improvements) <sup>1</sup> .....do....	234,427.76
Loan to Wilmington & Philadelphia Traction Co. (electric installation)..	18,807.78
Loan to Wilmington Gas Co. (gas installation).....	30,787.79
Loan to city of Wilmington for public utilities.....	160,000.00

BRISTOL, PA.

Merchant Shipbuilding Co.:	
Land.....	192,278.07
Stewart A. Jellett Co. (heating).....lump sum..	179,021.00
Wells & Newton (plumbing).....do....	47,700.00
Gent Construction Co. (electric wiring and fixtures).....do....	21,363.00
Fred T. Ley (general contractor).....fee..	106,247.87
William Gordon (mechanical contractor).....do....	35,459.42

GLOUCESTER, N. J.

Pusey & Jones (land purchased by realty company):	
McArthur Bros. (construction contract).....fee..	80,000.00
Bissell & Sinkler (architects).....do....	10,000.00
W. A. Guenther (decorating) <sup>1</sup> .....lump sum..	16,830.00
Stewart Iron Works Co. (fences) <sup>1</sup> .....unit prices..	22,000.00
Arthur McMullen Co. (street improvements) <sup>1</sup> .....do....	139,358.20
Loan to city of Gloucester for public utilities and street improvements..	200,000.00
Loan to Public Service Gas Co. (gas installation).....	49,520.00
Loan to Public Service Electric Co. (electric installation).....	36,846.45

<sup>1</sup> These contracts were made to complete work originally included in general construction contracts but subsequently eliminated therefrom.

234 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

ESSINGTON, PA.

Westinghouse Electric & Manufacturing Co.:	
Dormitories (land purchased by realty company)—	
William Crawford (construction contract).....fee..	\$20,000.00
Houses (land purchased by realty company)—	
William Crawford (construction contract).....fee..	30,825.00
D. A. MacGregor & Bro. (decorating) <sup>1</sup> .....lump sum..	12,550.00
Loan to Springfield Water Co. for water supply and distribution.....	15,000.00
(This loan includes both projects.)	

JACKSONVILLE, FLA.

Merrill-Stevens Shipbuilding Co. (land purchased by realty company):	
W. P. Richardson & Co. (construction contract).....fee..	25,000.00
H. L. Lee (electric wiring and light fixtures).....lump sum..	11,987.80
Hooker & Lightbody (plumbing).....do....	48,964.70
Loan to city of South Jacksonville for public utilities, street improvements, etc.....	100,000.00
Loan through South Jacksonville Realty Co. to gas company for gas extension.....	26,113.21
Loan to Duval County, Fla., for road construction.....	15,031.49

PORT JEFFERSON, LONG ISLAND.

Bayles Shipyard (Inc.) (land purchased by Bayles Shipyard (Inc.):	
Mark Tredennick Co. (construction contract).....fee..	12,000.00
Public utilities and improvements will be borne by the appropriation for the project. Electric installation will be furnished by the electric company at no cost to the project.	

WYANDOTTE, MICH.

Detroit Shipbuilding Co. (land purchased by realty company):	
Loan to city of Wyandotte for public utilities, street improvements, etc.....	19,879.53

MANTOWOC, WIS.

Manitowoc Shipbuilding Co. (land purchased by realty company):	
Walter W. Oeflein (Inc.) (construction contract).....fee..	18,128.57
Manger & McGucken (street improvements) <sup>1</sup> .....unit price..	45,514.45
Gray Robinson Construction Co. (utilities) <sup>1</sup> .....do....	17,854.64
Loan to city of Manitowoc for public utilities, street improvements, etc., including electric extension.....	47,128.43
Loan to Manitowoc Gas Co. for gas installation.....	10,000.00

GROTON, CONN.

Groton Iron Works (land purchased by realty company):	
National Engineering Co. (construction contract).....fee..	22,500.00
G. A. Wells (street improvements) <sup>1</sup> .....lump sum..	12,277.40
Loan to borough of Groton for public utilities, street improvements, including electric extension.....	25,000.00
Loan to town of Groton for public utilities, street improvements, including electric extension.....	25,000.00

NEWBURGH, N. Y.

Newburgh Shipyards (land purchased by realty company):	
T. C. Desmond Co. (construction contract) <sup>1</sup> .....fee..	12,000.00
Harper & Guilfoil (street and house walks) <sup>1</sup> .....unit price..	11,600.00

<sup>1</sup> These contracts were made to complete work originally included in general construction contracts, but subsequently eliminated therefrom.



FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 235

TABLE XXIV.—Security held by Emergency Fleet Corporation for payment of sums expended on account of contracts for provision of transportation facilities.

Contract drawn with—	Date.	Revised estimated amount.	Security.	Amount.
	1918.			
Lewiston, Augusta & Water-ville Street Ry., Bath, Me.	July 15	\$68,974	Title to all new material purchased at estimated cost of. First mortgage refunding 5 per cent bonds of par value.	\$42,820 60,000
Receiver, Bay State Street Ry., Boston, Mass.	June 26	67,000	Title to all new material purchased at estimated first cost of. Receivers' certificates of face value of amount advanced.	49,152
Richmond Light & R. R. Co., New Brighton, Staten Island.	Aug. 28	570,544	Title to all new material purchased at estimated first cost of a lien on railroad company's earnings, consisting of one-tenth of cost power furnished the ship-yards during the war, and one-half of cost power furnished after the war.	522,045
Public Service Ry., Newark, N. J. (work at Kearney, N. J.)	Aug. 12	26,189	Franchise, consents, etc., and title to work at estimated first cost of.	26,189
Southern Pennsylvania Traction Co., Philadelphia, Pa.	July 31			
	Dec. 3			
	Sept. 4	89,919	Title to street cars of contract cost..... First mortgage bonds of Wilmington & Philadelphia Traction Co., at 75 per cent of their par value, to the net amount of.	319,634 89,919
Do.....		1,001,802	Full title to track of estimated cost of...	1,001,802
Delaware County Electric Co., Philadelphia, Pa.		56,333	Title to power equipment at estimated first cost of. Title to power apparatus at estimated first cost of.	56,333 569,785
Public Service Ry., Newark, N. J. (work at Camden, N. J.)	Apr. 18	1,140,780	Title to trackage at estimated first cost of. Title to street cars at estimated first cost of. Also bond executed by public service corporation guaranteeing performance of contract.	218,495 352,500
Public Service Ry., Newark, N. J. (Yorkship Village track).	July 11	240,000	Title to track construction at estimated first cost of.	240,000
United Railways & Electric Co., Baltimore, Md.	July 10	958,982	Title to street cars at contract cost of.... Franchises, consents, etc., and title to track at estimated first cost of.	822,510 136,472
Newport News & Hampton Ry., Gas & Electric Co., Hampton, Va.	May 21	319,000	Title to street cars at contract cost of.... Franchises, consents, etc., and title to track at estimated first cost of. Title to power apparatus purchased at estimated first cost of franchises, consents, etc.	114,465 204,535 200,000
Tidewater Power Co., Wilmington, N. C.	Aug. 28	378,500	First mortgage 6 per cent bonds at par value of amount of 85 per cent of amount advanced for track and overhead and at estimated first cost of. A lien on the power company's earnings, consisting of the profit on the power delivered to the shipyard. Retains ownership and title to 8 second-hand cars, costing.	150,000 28,500
Charles Swank et al., Beaumont, Tex.	Sept. 13	3,250	Title to ferryboat at contract cost of.....	3,250
Duluth Street Ry., Duluth, Minn.	Aug. 27	81,058	Title to cars, snowplow, and electrical apparatus at contract cost of. Title to cars at contract cost of.....	81,058 111,722
City of Tacoma, Tacoma, Wash.	Sept. 11	232,398	Title to track and all other facilities provided as estimated first cost of. Bonds of the municipal street car line, guaranteed as to principal and interest by the city of Tacoma to the face value of. All rights, franchises, etc., necessary to construction and operation.	120,676 232,400
Portland Ry., Light & Power Co., Portland, Oreg.	July 13	150,329	Title to street cars of contract cost of.... Title to trackage provided at an estimated first cost of. All rights, franchises, etc., necessary to construction and operation.	145,187 5,142
San Francisco-Oakland Terminal Co.	Aug. 16	9,675	Note of the Emergency Transportation Co., guaranteed by the San Francisco-Oakland Terminal Co. as to principal. Interest stock of the Emergency Transportation Co. of par value.	9,675 10,100

236 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE XXIV.—Security held by Emergency Fleet Corporation for payment of sums expended on account of contracts for provision of transportation facilities—Continued.

Contract drawn with—	Date.	Revised estimated amount.	Security.	Amount.
	1918.			
San Diego Electric Ry. Co. . . . .	Sept. 10	\$46,884	Title to trackage and property . . . . .	\$46,884
Philadelphia Rapid Transit Co., Philadelphia, Pa.	Mar. 20	2,161,655	Title to trolley cars, track, and overhead and additional power equipment provided at estimated first cost of.	2,161,655
Philadelphia Rys. Co., Philadelphia, Pa.	-----	974,883	do. . . . .	974,883
Public Service Ry. Co., Newark, N. J.	Mar. 7	687,995	Title to trolley cars and track and overhead provided at estimated first cost of.	687,995

TABLE XXV.—Contracts entered into by Emergency Fleet Corporation for providing street railway facilities for transportation of shipyard employees.

Contract No.	Contract drawn with—	Description of work.	Amount authorized in contract.	Revised total estimated expenditures.	Estimated amount to be returned to Government.	Estimated amount to net loss to Government.
1	Lewiston, Augusta & Waterville Street Ry., Bath, Me.	Install 13,000-volt transmission line and alter track. Purchase 6 passenger cars and 1 snowplow.....	\$71,500.00 99,000.00	\$68,974.95 3,194.19	\$20,000.00	\$48,974.95 3,194.19
2	National Engineering Corporation (Harry A. Wood), Boston, Mass.	Wooden auto roadway (Fortsmouth, N. H.).....	170,500.00 3,343.00			
3	Receiver, Bay State Street Ry., Boston, Mass.	Purchase substation equipment.....	32,000.00			
		Rehabilitate 26 passenger cars.....	35,135.14			
4	Metropolitan Park Commission, Boston, Mass.	Widening Neponset River Bridge.....	67,135.14 62,236.00	67,000.14 53,462.74	54,743.25	12,256.89 53,462.74
5	Richmond Light & R. R. Co., New Brighton, Staten Island, N. Y.	Purchase 20 passenger cars.....	260,000.00			
		Improve power facilities.....	346,460.00			
			606,450.00			
6	Public Service Ry., Newark, N. J.	Install track loop.....	10,591.00			
		Install railway feeder.....	28,995.00			
			39,586.00	26,189.65	16,994.14	9,195.51
7	Southern Penn. Traction Co.	Purchase 22 passenger cars.....	319,000.00	319,634.60	239,725.95	79,908.65
		Rehabilitate 14 miles of track.....	86,412.70	89,919.85	89,919.85	
		Construct 6 miles of single track, and roadway along Chester Pike between Darby and Eddystone.....	733,000.00	1,001,902.33	818,167.53	183,634.80
8	Delaware County Electric Co.	Install additional equipment in Folsom substation.....	80,000.00	56,333.63	36,000.00	20,333.63
9	Public Service Ry., Newark, N. J.	Install electrical apparatus in power house and substations. Erect transmission line and feeder. Construct 2 terminal loops and purchase 33 passenger cars.....	1,218,412.70	1,467,660.41	1,183,813.33	283,877.08
10	Do.	Extend track to Yorkship Village.....	1,240,780.00	1,140,780.00	855,585.00	285,195.00
			250,000.00	240,000.00	219,587.25	20,412.75
11	United Railways & Electric Co. of Baltimore, Md.	Extend track to Sparrows Point.....	145,472.25			
		Purchase 50 passenger cars.....	967,982.25	958,982.25	719,236.69	239,745.56

1 Amount required covers paying not included in original estimate.

TABLE XXV.—Contracts entered into by Emergency Fleet Corporation for providing street railway facilities for transportation of shipyard employees—Continued.

Contract No.	Contract drawn with—	Description of work.	Amount authorized in contract.	Revised total estimated expenditures.	Estimated amount to be returned to Government.	Estimated net loss to Government.
12	Newport News & Hampton Ry, Gas & Electric Co., Hampton, Va.	Install 3.8 miles of track. Purchase 10 passenger cars.	\$175,000.00 125,000.00	\$319,000.00	\$239,250.00	\$79,750.00
13	Tidewater Power Co., Wilmington, N. C.	Purchase 8 second-hand passenger cars Install track and overhead. Install additional power facilities.	28,500.00 150,000.00 200,000.00			
14	Chatham County (Russell Estate) Savannah, Ga.	Purchase of right of way.	378,500.00	378,500.00	273,000.00	105,500.00
15	Mobile Light & Ry. Co., Mobile, Ala.	Purchase 9 cars and extend track.	4,415.46	4,415.46	.....	4,415.46
16	Chas. Swanik et al., Beaumont, Tex.	Purchase ferry equipment.	7,500.00	9,000.00	.....	9,000.00
17	Duluth Street Ry, Duluth, Minn.	Purchase of 6 passenger cars, 1 snowplow and substation equipment.	3,250.00	3,250.00	2,000.00	1,250.00
18	New York Central R. R., Ashtabula, Ohio	Sidewalk along bridge.	81,068.67	81,068.67	60,794.00	20,274.67
19	City of Tacoma, Wash.	Purchase 10 second-hand cars Construction of track and loading station.	6,000.00 74,100.00 185,200.00	185.16	.....	185.16
20	Portland Ry, Light & Power Co., Portland, Oreg.	Purchase 25 passenger cars Construct 3 track loops.	232,400.00 150,000.00 21,000.00	232,368.40	202,229.21	30,139.19
21	San Francisco-Oakland Terminal Co., Oakland, Calif.	Construction of track.	171,000.00	150,329.80	112,747.35	37,582.45
22	San Diego Electric Ry, San Diego, Calif.	Purchase 31 cars.	4,675.00	4,675.00	9,675.00	.....
23	Philadelphia Rapid Transit Co.	Install 1 mile of single track.	465,000.00	3,817.49	46,868.65	6,817.49
24	Philadelphia Rys. Co., Philadelphia, Pa.	Purchase 100 cars, install track and power equipment and terminals.	57,000.00	46,868.65	.....	.....
25	Public Service Ry. Co., Newark, N. J.	Purchase 30 cars, install track and power equipment. Purchase 18 cars and extend track.	2,271,655.52 820,000.00 887,344.33	2,161,655.52 974,888.06 687,966.01	1,080,827.76 487,441.53 309,897.75	1,080,827.76 487,441.53 378,997.26
		Total.	10,845,340.77	9,622,865.55	6,945,605.91	3,317,359.64

TABLE XXVI.—*Ex-enemy vessels.*

## "AEOLUS," FORMERLY "GROSSER KURFURST" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	562 feet.
Over all.....	580 feet 10 inches.
Breadth.....	62 feet.
Draft:	
Mean.....	28 feet 7½ inches.
Aft.....	30 feet.
Displacement.....	20,000 tons.
Depth of hold.....	35 feet 10½ inches.
Tonnage:	
Gross.....	13,102.
Net.....	7,831.
Speed.....	15.5 knots.
Bunker:	
Capacity.....	1,990 tons.
Reserve.....	1,713 tons.
Number of propellers.....	2
Engines (vertical, 4-expansion):	
Cylinders.....	27½, 41, 59, and 83½ inches.
Stroke.....	53½ inches.
Boilers (5 double-end, 2 single-end, Scotch):	
Grate surface.....	697 square feet.
Heating surface.....	25,835 square feet.
Indicated horsepower.....	9,000.
Electric generator sets:	
1 35-kw., 110-v., C. C., General Electric.	
3 35-kw., 110-v., M. P., Union Works, Berlin.	
Built.....	1899; F. Schichau, Danzig, Ger- many.
Tons daily fuel consumption at 15 knots.....	130.
Fuel—coal (now equipped for burning oil).	
Steaming radius:	
Days.....	41½.
Knots.....	14,940.

## "AGAMEMNON," FORMERLY "KAISER WILHELM II" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	684 feet 3 inches.
Over all.....	706 feet 6 inches.
Breadth.....	72 feet 3 inches.
Draft:	
Aft.....	31 feet 6 inches.
Mean.....	29 feet 10 inches.
Displacement.....	25,530 tons.
Depth of hold.....	40 feet 2½ inches.
Tonnage:	
Gross.....	19,360.
Net.....	6,352.
Speed.....	23.5 knots.
Bunker capacity.....	5,625 tons.
Fuel.....	Coal.
Number of propellers.....	2.
Engines (vertical, 4-expansion; 2 engines on each shaft):	
Cylinders.....	37½, 49½, 74½, and 112½ inches.
Stroke.....	71 inches.
Boilers (12 double-end; 7 single-end, Scotch):	
Grate surface.....	3,123 square feet.
Heating surface.....	107,644 square feet.
Indicated horsepower.....	45,000 (total maximum).
Electric generator sets.....	5 85-kw., 110 v., Shunt-wound; Union Works, Berlin.
Built.....	1902; Akt. Ges. "Vulkan," Stettin.

## "AMERICA," FORMERLY "AMERIKA" (HAMBURG-AMERICAN).

Length:	
Between perpendiculars.....	669 feet.
Over all.....	687 feet.
Breadth.....	74 feet 3 inches.
Draft:	
Mean.....	39 feet 5½ inches.
Aft.....	39 feet 5½ inches.
Displacement.....	40,700 tons.
Depth of hold.....	47 feet 9 inches.
Tonnage:	
Gross.....	22,622.
Net.....	13,637.
Speed.....	17.5 knots.
Bunker capacity.....	5,550 tons.
Number of propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinders.....	34, 49, 71, and 100 inches.
Stroke.....	63 inches.
Boilers (8 double-end, Scotch):	
Grate surface.....	994 square feet.
Heating surface.....	39,614 square feet.
Indicated horsepower.....	15,600.
Total maximum.....	17,500.
Electric generator sets.....	1 30-kw., 100-v.; 5 75-kw., 100 v., W. H. Allen.
Built.....	1905; Harland & Wolf, Belfast Ireland.

## "AMPHION," FORMERLY "KOLN."

Length:	
Between perpendiculars.....	428 feet 9 inches.
Over all.....	
Breadth (molded).....	54 feet 3 inches.
Depth (molded).....	39 feet 4 inches.
Draft (loaded).....	38 feet 3 inches.
Displacement.....	45 tons per inch, loaded.
Tonnage:	
Gross.....	7,409.
Net.....	4,665.
Summer (dead-weight tons).....	3,970.
Speed.....	11 knots.
Bunker:	
Capacity.....	978 tons.
Reserve.....	980 tons.
Fuel.....	Coal.
Daily consumption.....	62 tons.
Number of propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinders.....	22, 33, and 62 inches.
Stroke.....	43 inches.
Boilers (2 double-end; 2 single-end, Scotch):	
Grate surface.....	349 square feet.
Heating surface.....	10,657 square feet.
Indicated horsepower.....	3,300.
Built.....	1899; J. C. Tecklenborg, Geestemunde.
Total bale, cubic.....	447,455.
Total grain, cubic.....	484,329.
Total water ballast.....	1,234 tons
Six holds; 6 hatches; largest hatch, 26 by 16 feet; 17 booms; 10 winches; 5 tons lift.	

"ANTIGONE," FORMERLY "NECKER" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	493 feet 3 inches.
Over all.....	518 feet 1 inch.
Breadth.....	58 feet 1 inch.
Draft (mean).....	27 feet.
Displacement.....	17,024 tons.
Depth of hold.....	37 feet.
Tonnage:	
Gross.....	9,835.
Net.....	6,199.
Speed.....	14 knots.
Bunker capacity.....	1,502 tons.
Reserve.....	2,115 tons.
Number of propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	24, 34, 48½, 71½ inches.
Stroke.....	51½ inches.
Boilers (2 double-end, 3 single-end; Scotch):	
Grate surface.....	419 square feet.
Heating surface.....	16,717 square feet.
Indicated horsepower.....	5,500.
Total, maximum.....	5,600.
Electric generator sets.....	Three 27-kw., 100-v., 6-pole shunt, Union Electric Works.
Built.....	1900; J. C. Geesetmunde, Ger- many.

"ARTEMIS," FORMERLY "BOHEMIA."

Length (between perpendiculars).....	500 feet 5 inches.
Breadth (molded).....	58 feet 3 inches.
Depth (molded).....	34 feet.
Draft (loaded).....	30 feet 2½ inches.
Summer dead-weight tonnage.....	11, 925
Tonnage:	
Gross.....	8,413.
Net.....	5,247.
Speed.....	12½ knots.
Steaming radius.....	6,300
Fuel.....	Coal.
Bunker capacity.....	1,605 tons.
Daily consumption.....	79 tons.
Number of propellers.....	2.
Engines (vertical, 3-expansion):	
Cylinder.....	23½, 39, 66 inches.
Stroke.....	48 inches.
Boilers.....	2 double-end, 2 single-end; Scotch.
Indicated horsepower.....	5,600, 5,000.
Built.....	1902; Harland & Wolff, Belfast.
Total bale, cubic.....	699,906.
Total grain, cubic.....	780,770.
Water ballast:	
Double bottom.....	1,530 tons.
Peaks.....	257
Deep tank.....	2,963
10 holds; 10 hatches; largest hatch, 15 feet 3½ inches by 28 feet 1 inch; 20 booms; 17 winches, 5 tons lift.	

"BLACK ARROW," FORMERLY "BLACK HAWK" (EX "RHAETIA").

Length (between perpendiculars).....	408 feet.
Breadth (molded).....	52 feet 6 inches.
Depth (molded).....	30 feet 9 inches.
Draft (loaded).....	25 feet 11½ inches.

242 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

Tonnage:

Gross.....	6,599.
Net.....	4,141.
Summer dead weight tonnage.....	7,050.
Speed.....	11 knots.
Bunker capacity, total.....	1,590 tons.
Daily consumption.....	46 tons.
Number of propellers.....	1.
Steaming radius.....	8,784
Engines (vertical, 4-expansion):	
Cylinder.....	24, 35, 51, 72 inches.
Stroke.....	54 inches.
Boilers.....	4 single-end; Scotch.
Grate surface.....	210 square feet.
Indicated horsepower.....	3,200.
Built.....	1904; Bremer Vulcan Works, Vege sack.
Total bale, cubic.....	330,330.
Total grain, cubic.....	356,229.
Total water ballast.....	1,144 tons.
6 holds; 6 hatches; largest hatch, 29 by 17 feet; 18 booms; 12 winches, 5 tons lift.	

"DE KALB," FORMERLY "PRINZ EITEL FRIEDRICH" (NORTH GERMAN LLOYD).

Length:

Between perpendiculars.....	488 feet 3 inches.
Over all.....	506 feet 6 inches.
Breadth.....	55 feet 7 inches.
Draft (mean).....	26 feet.
Displacement.....	14,180 tons.
Depth of hold.....	32 feet 1 inch.
Tonnage:	
Gross.....	8,797.
Net.....	4,812.
Speed.....	16.5 knots.
Fuel.....	Coal.
Bunker capacity.....	1,774 tons.
Reserve.....	1,900 tons.
Number of propellers.....	2.
Engines (vertical, 2-expansion):	
Cylinder.....	25, 36½, 52, 75 inches.
Stroke.....	55 inches.
Boilers.....	Double-end; 2 single-end; Scotch.
Grate surface.....	434 square feet.
Heating surface.....	16,792 square feet.
Twin, 4,000; indicated horsepower, each.....	8,000.
Electric generator sets.....	2 100-kw., 100-v., shunt-wound, German.
Built.....	1901; Akt. Ges. Vulkan, Stettin, Germany.

"ETEN," FORMERLY "REAKOTIS."

Length (between perpendiculars).....	435 feet 7 inches.
Breadth (molded).....	53 feet 2 inches.
Depth (molded).....	28 feet 2 inches.
Draft:	
Mean.....	22 feet 11 inches.
Forward.....	22 feet.
Aft.....	23 feet 10 inches.
Tonnage:	
Gross.....	6,982.
Net.....	4,475.
Dead weight tons.....	8,500.
Speed.....	12 knots.
Steaming radius.....	11,000 knots.
Fuel.....	Coal.



Bunker capacity.....	1,620 tons.
Daily fuel consumption.....	60 tons.
Engines (2 triple-expansion; Germany, 1907):	
Starboard.....	22 $\frac{7}{8}$ , 35 $\frac{7}{8}$ , 61 $\frac{1}{8}$ , 42 $\frac{1}{2}$ inches.
Port.....	22 $\frac{7}{8}$ , 35 $\frac{7}{8}$ , 61 $\frac{1}{8}$ , 42 $\frac{1}{2}$ inches.
Boilers.....	3 German-Scotch; 1 American-Scotch.
Indicated horsepower.....	3,162.
Number of decks.....	2.
Largest hatch.....	29 by 16 feet.
Passenger accommodations.....	80 first class.
Built.....	B. Cohn & Voss, Hamburg, 1907.
Rebuilt at.....	Balboa, Spain; 1919.

"FREEDOM," FORMERLY "WITTEKIND" (NORTH GERMAN LLOYD).

Length (between perpendiculars).....	383 feet 5 inches, 383 feet.
Breadth.....	46 feet 4 inches, 46 feet.
Depth (molded).....	27 feet, 27 feet.
Draft (mean).....	24 feet 10 $\frac{1}{2}$ inches, 24 feet 10 $\frac{1}{2}$ inches.
Summer.....	6,440 dead-weight tons.
Displacement.....	9,674 tons.
Depth of hold.....	27 feet 2 inches.
Tonnage:	
Gross.....	5,640.
Net.....	3,607.
Speed.....	11.8 knots.
Bunker capacity.....	1,402 tons.
Reserve.....	835 tons.
Number of propellers.....	2.
Engines (vertical, 2-expansion):	
Cylinder.....	22 $\frac{7}{8}$ , 35, and 60 inches.
Stroke.....	42 inches.
Boilers (2 double-end, 2 single-end; Scotch):	
Grate surface.....	254 square feet.
Heating surface.....	8,206 square feet.
Indicated horsepower.....	2,700.
Electric generator sets.....	Two 21.7 kw., 100 v., d. c.; Kinnon & Halske.
Total cargo, bale.....	310,290.
Total cargo, grain.....	343,505.
Water ballast:	
Double bottom.....	637.
Peaks.....	104.
Deep tank.....	85.
Built.....	1894; Blohm & Voss, Hamburg.
(5 holds; 5 hatches; largest hatch, 10 booms; 5 winches, 5-lift.)	

"HURON," FORMERLY "FRIEDRICH DER GROSSE" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	525 feet 3 inches.
Over all.....	545 feet 6 inches.
Breadth.....	60 feet.
Draft:	
Mean.....	28 feet.
Aft.....	29 feet 6 $\frac{1}{2}$ inches.
Displacement.....	11,080 tons.
Depth of hold.....	34 feet 9 $\frac{3}{4}$ inches.
Tonnage:	
Gross.....	10,771.
Net.....	6,854.
Speed.....	15.5 knots.
Fuel.....	Originally coal, now oil.
Bunker capacity.....	2,389 tons.

244 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

Number of propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	25, 38, 52½, and 75½ inches.
Stroke.....	55 inches.
Total capacity:	
Oil.....	3,000 tons.
Cubic feet (38 per ton).....	113,972.
Daily consumption at 15 knots.....	104 tons.
Day's steaming radius.....	29.
Steaming radius.....	10,440 knots.

"MADAWASKA," FORMERLY "KOENIG WILHELM II" (HAMBURG-AMERICAN LINE).

Length:	
Between perpendiculars.....	490 feet 4 inches.
Over all.....	508 feet.
Breadth.....	55 feet 3 inches.
Draft:	
Mean.....	27 feet 5 inches.
Aft.....	34 feet.
Displacement, full load.....	15,010 tons.
Depth of hold.....	31 feet 2 inches.
Tonnage:	
Gross.....	9,410.
Net.....	5,764.
Speed.....	15.5 knots.
Bunker capacity.....	3,800 tons.
Number of propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	25, 36, 52, and 75 inches.
Stroke.....	55 inches.
Boilers (3 double-end, 1 single-end; Scotch):	
Grate surface.....	404 square feet.
Heat surface.....	20,272 square feet.
Indicated horsepower.....	7,800 total maximum.
Electric generator sets.....	Four 40 kw., 110 v., d. c.; Siemens & Schuckart.
Built.....	1907; Akt. Ges. Vulkan, Stettin.

"MARTHA WASHINGTON," FORMERLY UNIONE AUSTR. DI NAVIG. (AUSTRIAN).

Length:	
Between perpendiculars.....	460 feet.
Over all.....	470 feet.
Breadth.....	56 feet.
Draft, mean.....	24 feet 9 inches.
Displacement.....	12,700 tons.
Tonnage:	
Gross.....	8,312.
Net.....	5,379.
Speed.....	17.2 knots.
Bunker capacity.....	1,551 tons.
Number of propellers.....	2.
Engines (vertical, 3-expansion):	
Cylinder.....	27½, 45, and 75 inches.
Stroke.....	51 inches.
Boilers (6 single-end, Scotch; 1 auxiliary):	
Grate surface.....	427 square feet.
Heat surface.....	16,757 square feet.
Indicated horsepower.....	7,218 total maximum.
Electric generator sets.....	Two 60 kw., 110 v., d. c., m. p.; Bennet & Luthertford.
Built.....	1908; Russel & Co., Fort Glasgow, Scotland.

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 245

"MERCURY," FORMERLY "BARBAROSSA" (NORTH GERMAN LLOYD).

Length:	
On water line.....	527 feet 3 inches.
Over all.....	544 feet.
Breadth.....	60 feet.
Draft:	
Mean.....	26 feet.
Aft.....	28 feet 5 inches.
Displacement.....	17,114 tons.
Depth of hold.....	34 feet 7½ inches.
Tonnage:	
Gross.....	10,983.
Net.....	6,462.
Speed.....	14 knots.
Bunker capacity.....	3,500 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	25½, 37, 54½, 77½ inches.
Stroke.....	54 inches.
Boilers (5 double-end, 2 single-end; Scotch):	
Grate surface.....	565 square feet.
Heating surface.....	18,620 square feet.
Indicated horsepower.....	7,200.
Electric generator sets.....	3 28-kw., 110-v.; Siemens & Halske.
Built.....	1896; Blohm & Voss, Hamburg.

"MOUNT VERNON," FORMERLY "KRONPRINZESSEN CECILIE" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	685 feet 4 inches.
Over all.....	706 feet 6 inches.
Breadth.....	72 feet 2 inches.
Draft:	
Mean.....	31 feet 6 inches.
Aft.....	33 feet 1 inch.
Displacement, full load.....	29,650 tons.
Depth of hold.....	40 feet 5½ inches.
Tonnage:	
Gross.....	19,503.
Net.....	6,584.
Speed.....	24 knots.
Bunker capacity.....	5,452 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	37½, 49½, 74½, 112½ inches.
Stroke.....	71 inches.
Boilers (12 double-end, 7 single-end; Scotch):	
Grate surface.....	3,123 square feet.
Heating surface.....	107,148 square feet.
Indicated horsepower.....	45,000, total maximum.
Electric generator sets.....	5 110-kw., 110-v. M. P.; General Electric.
Built.....	1906; Akt. Ges. Vulkan, Stettin.

"NANSEMOND," FORMERLY "PENNSYLVANIA" (HAMBURG-AMERICAN LINE).

Length (between perpendiculars).....	559 feet 5 inches.
Breadth.....	62 feet 2 inches.
Draft (mean).....	32 feet 8 inches.
Displacement.....	25,000 tons.
Depth of hold.....	40 feet 8 inches.
Tonnage:	
Gross.....	13,332.
Net.....	8,526.
Fuel.....	Coal.
Speed.....	13.0 knots.

246 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

Bunker capacity.....	2,821 tons.
Number propellers.....	2.
Engines (vertical, 2-expansion):	
Cylinder.....	23, 33, 43, 69 inches.
Stroke.....	54 inches.
Boilers.....	3 double-end, 2 single-end; Scotch.
Indicated horsepower.....	5,500.
Total maximum.....	6,000.
Electric generator sets.....	3 110-v.; Allen & Kieler.
Built.....	1896; Harland & Wolff, Belfast.

"OTSEGO," FORMERLY "PRINZ ETTTEL FRIEDRICH."

Length (between perpendiculars).....	370 feet.
Breadth (molded).....	45 feet.
Draft (loaded).....	25 feet 4 inches.
Depth (molded).....	29 feet 6 inches.
Tonnage:	
Gross.....	4,650.
Net.....	2,920.
Speed.....	11 knots.
Steam radius.....	11,000 knots.
Bunker capacity.....	637 tons.
Reserve.....	840 tons.
Number propellers.....	1.
Engines (vertical, 4-expansion):	
Cylinder.....	22½, 32½, 47, 68 inches.
Stroke.....	47½ inches.
Boilers.....	2 double-end; Scotch.
Indicated horsepower.....	2,400.
Built.....	1901; Rheinhersts Shipbuilding Co., Hamburg.

"PHILIPPINES," FORMERLY "HERCULES" (EX "BULGARIA").

Length (between perpendiculars).....	501 feet 4 inches.
Breadth (molded).....	62 feet 2 inches.
Depth (molded).....	40 feet 6 inches.
Draft (loaded).....	30 feet 10 inches.
Tonnage:	
Gross.....	11,440.
Net.....	7,305.
Speed.....	10 knots.
Fuel.....	Coal.
Bunker capacity.....	1,138 tons.
Reserve.....	475 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	21, 31, 46, 66½ inches.
Stroke.....	48 inches.
Boilers (2 double-end; Scotch):	
Grate surface.....	354 square feet.
Heating surface.....	11,680 square feet.
Indicated horsepower.....	4,000.
Built.....	1898; Blohm & Voss, Hamburg

"POCAHONTAS," FORMERLY "PRINCESS IRENE" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	523 feet 6 inches.
Over all.....	564 feet.
Breadth.....	60 feet 2 inches.
Draft:	
Mean.....	26 feet.
Aft.....	28 feet 6 inches.
Displacement.....	18,000 tons.
Depth of hold.....	34 feet 8½ inches.

Tonnage:	
Gross.....	10,893.
Net.....	6,443.
Speed.....	16.0 knots.
Bunker capacity.....	1,787 tons.
Reserve.....	1,585 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinder.....	27½, 40, 57½, 82½ inches.
Stroke.....	55 inches.
Boilers (3 double-end, 3 single-end; Scotch):	
Grate surface.....	527 square feet.
Heating surface.....	19,764 square feet.
Indicated horsepower.....	3,000.
Electric generator sets.....	3 40-kw., 100-v., shunt.
Built.....	1900; Akt. Ges. Vulkan, Stettin

"PORTO RICO," FORMERLY "MOCCASIN" (EX-PRINZ JOACHIM).

Length.....	370 feet 9 inches.
Breadth (molded).....	45 feet 2 inches.
Depth (molded).....	29 feet 6 inches.
Draft.....	24 feet.
Gross tons.....	4,301.
Net tons.....	2,396.
Dead-weight tons.....	5,400.
Engines.....	23½, 33½, 49½, 72 inches.
Stroke.....	48 inches.
Boilers.....	3 single-end; Scotch.
Speed.....	12 knots.
Indicated horsepower.....	3,000.
Steaming radius.....	10,650 knots.
Fuel.....	Formerly coal; now oil.
Passengers (2 in room):	
First class.....	120.
Third class.....	50.

"POWHATAN," FORMERLY "HAMBURG" (HAMBURG-AMERICAN LINE).

Length (between perpendiculars).....	499 feet 3 inches.
Breadth.....	60 feet 2 inches.
Draft (mean).....	29 feet 8 inches.
Displacement.....	18,026 tons.
Tonnage:	
Gross.....	10,532.
Net.....	6,420.
Speed.....	15 knots.
Bunker capacity.....	3,500 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinders.....	27½, 40, 57½, 82½ inches.
Stroke.....	55 inches.
Boilers (3 double-end, 3 single-end; Scotch):	
Grate surface.....	529 square feet.
Heating surface.....	19,829 square feet.
Indicated horsepower.....	3,000.
Electric generator sets.....	3 40-kw., 100-v., shunt; Dasvel, Kiel.
Built.....	1899; Akt. Ges. Vulkan, Stettin.

"PRESIDENT GRANT;" SAME NAME IN HAMBURG-AMERICAN LINE.

Length:	
Between perpendiculars.....	599 feet.
Over all.....	615 feet.
Breadth.....	68 feet 2 inches.
Draft:	
Mean.....	34 feet.
Aft.....	38 feet.

Displacement, full load .....	35,200 tons.
Tonnage:	
Gross .....	18,072.
Net .....	11,112.
Speed .....	14.5 knots.
Bunker capacity .....	2,889 tons.
Reserve .....	1,585 tons.
Number propellers .....	2.
Engines (vertical, 4-expansion):	
Cylinder .....	25, 36, 52½, 75 inches.
Stroke .....	54 inches.
Boilers (4 double-end, 1 single-end; Scotch; 1 W. T.):	
Grate surface .....	592 square feet.
Heating surface .....	22,928 square feet.
Indicated horsepower .....	7,500.
Total maximum .....	7,650.
Electric generator sets .....	4 48-kw., 100-v., D. C.; 1 18½-kw., 100-v., D. C.; W. H. Allen & Son.
Built .....	1907; Harland & Wolf, Belfast.

"PRINCESS MATOIKA," FORMERLY "PRINCESS ALICE" (NORTH GERMAN LLOYD).

Length:	
On water line .....	522 feet 8 inches.
Between perpendiculars .....	523 feet 5 inches.
Over all .....	544 feet 11 inches.
Breadth .....	60 feet 1 inch.
Depth .....	34 feet 7 inches.
Draft, mean .....	29 feet 6 inches.
Displacement .....	20,500 tons.
Summer dead-weight tons .....	10,500.
Depth of hold .....	10.492.
Tonnage:	
Gross .....	10,981.
Net .....	6,068.
Total water ballast .....	6,629.
Total water ballast .....	4,501 tons.
Speed .....	16 knots; 14.7 knots.
Bunker capacity .....	1,787 tons.
Reserve .....	2,060 tons.
Daily consumption .....	120 tons.
Number of propellers .....	2.
Engines (vertical, 4-expansion):	
Cylinders .....	28, 40½, 57½, and 83½ inches.
Aft .....	54½ inches.
Boilers (3 double-end, 3 single-end; Scotch):	
Grate surface .....	520 square feet.
Heating surface .....	20,440 square feet.
Indicated horsepower .....	8,000.
Total maximum .....	9,000.
Electric generator sets .....	3 40-kw., 100-v.; Siemens & Halske.
Built .....	1900; Akt. Ges. Vulkan, Stettin.
Classed with Lloyd's.	
7 holds; 8 hatches; largest hatch, 22 feet 4 inches by 15 feet; 19 booms, 11 winches, heaviest lift, 17 tons.	

"SUSQUEHANNA," FORMERLY "RHEIN" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars .....	501 feet.
Over all .....	520 feet.
Breadth .....	58 feet 1 inch.
Draft (mean) .....	28 feet.
Displacement .....	17,857 tons.
Depth of hold .....	36 feet 8 inches.

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 249

Tonnage:	
Gross.....	10,058.
Net.....	6,398.
Speed.....	14 knots.
Fuel.....	Coal.
Bunker capacity.....	1,358 tons.
Reserve.....	2,127 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion):	
Cylinders.....	23 $\frac{1}{2}$ , 34, 48 $\frac{1}{2}$ , and 69 $\frac{1}{2}$ inches.
Stroke.....	51 $\frac{1}{2}$ inches.
Boilers (2 double-end, 2 single-end):	
Grate surface.....	349 square feet.
Heating surface.....	14,348 square feet.
Indicated horsepower.....	5,300 total maximum.
Electric generator sets.....	3 32-kw., 100-v.; 6-pole, shunt; Siemens & Halske.
Built.....	1899; Blohm & Voss, Hamburg

"SUWANEE," FORMERLY "MARK."

Length (between perpendiculars).....	472 feet 5 inches.
Breadth (molded).....	59 feet.
Depth (molded).....	39 feet 2 $\frac{1}{2}$ inches.
Draft (loaded).....	26 feet 4 inches.
Tonnage:	
Gross.....	6,493.
Net.....	3,998.
Speed.....	12 $\frac{1}{2}$ knots.
Fuel.....	Coal.
Bunker capacity.....	1,397 tons.
Reserve.....	1,778 tons.
Number propellers.....	1.
Engines (vertical, 3-expansion):	
Cylinders.....	32 $\frac{1}{2}$ , 52 $\frac{1}{2}$ , and 86 $\frac{1}{2}$ inches.
Stroke.....	55 $\frac{1}{2}$ inches.
Boilers.....	4 single-end; Scotch.
Indicated horsepower.....	3,800.
Built.....	1913; Bremer, Vulcan Works, Vegesack.

"VON STEUBEN," FORMERLY "KRONPRINZ WILHELM" (NORTH GERMAN LLOYD).

Length:	
Between perpendiculars.....	635 feet.
Over all.....	663 feet.
Breadth.....	66 feet.
Draft (mean).....	30 feet.
Displacement.....	23,500 tons.
Depth of hold.....	39 feet 3 $\frac{1}{2}$ inches.
Tonnage:	
Gross.....	14,908.
Net.....	5,162.
Speed.....	23 knots.
Fuel.....	Coal.
Bunker capacity.....	4,973 tons.
Number propellers.....	2.
Engines (vertical, 4-expansion; 2 H. P. cylinders, 2 L. P. cylinders):	
Cylinders.....	34 $\frac{1}{2}$ , 69, 98 $\frac{1}{2}$ , and 102 $\frac{1}{2}$ inches.
Stroke.....	71 inches.
Boilers (12 double-end, 4 single-end; Scotch):	
Grate surface.....	2,703 square feet.
Heating surface.....	93,862 square feet.
Indicated horsepower.....	35,000 total maximum.
Electric generator sets.....	4 82 $\frac{1}{2}$ -kw., 100-v. M. P.; Union Works Berlin.







TABLE II.—United States Shipping Board steel cargo vessels employed in foreign trade, showing port of origin, trade region in which employed, and number of vessels operating from each port.

	Baltic Sea.	United Kingdom.	North Sea.	French Atlantic.	North European.	Portugal-Spain.	North Mediterranean.	Adriatic Sea.	Aegean Sea.	Black Sea.	Africa, east coast.	Africa, west coast.	Indian Ocean.	Straits Settlements.	Dutch East Indies.	Australia.	New Zealand.	New Guinea.	Hawaii.	Siberia.	Orient.	Philippines.	Brazil.	River Plate.	South America, west coast.	West Indies.	Caribbean.	Foreign ports.	British India.	Mexico and Central America.	Total.	
Portland, Me.....			8																													5
Boston.....	12	1	8	1						3															1							28
New York.....	11	6	17	21					1	20	9	12	2		8	9					34		7	26	6		4		2	33	278	
Philadelphia.....	12	3	23	13		3	16														3		2	6	3						71	
Baltimore.....	8	9	21	10		1	16		2	1	2										6		1	6	10					2	131	
New York.....	15	7	20	10		1	22	2	1	1	3	1							2		6		1	8	19				1	132		
Wilmington, N. C.....			1																				1								2	
Charleston.....			3	7			2																								14	
Savannah.....	1	3	7	4			3				2																				32	
Jacksonville.....			3	3			2														1		1	4							11	
Tallahassee.....							1																								3	
Mobila.....		7	1	1			1				1																				94	
New Orleans.....	2	23	8	7			3		2	1			1								2	1	6	3	26	1		1	4	3	303	
Galveston.....		13	6	2			9														2					8					2	
Gulfport.....																																60
San Francisco.....	1	3	1	2						3	1		1	1		2			6		33	5		2				1	1	1	60	
Panama.....		2								1																					6	
Los Angeles.....																																4
Tacoma.....																																4
Seattle.....																																27
Portland, Oreg.....		1																														17
Foreign ports.....																													63			63
Total.....	42	85	121	78		5	75	2	7	26	23	13	4	1	8	12			10	114	6	18	75	36	145	5	63	4	45		1,028	

TABLE III.—Employment of Shipping Board tonnage for the month ending June 30, 1920.

	European food relief.	Army.	Navy.	Northern Europe.	Southern Europe.	Africa.	Trans-Pacific.	South America.	West Indies and Caribbean.	Domestic.	Foreign ports.	Total.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1919.												
March.....	17.0	35.7	4.9	5.1	6.8	1.9	6.6	10.2	8.0	3.8		100
April.....	22.5	22.1	4.0	7.5	4.3	4.5	6.3	12.4	8.9	8.4		100
May.....	26.8	24.3	2.4	9.4	3.5	7.7	7.2	10.8	7.8	7.1		100
June.....	17.7	17.3	2.4	22.3	4.7	1.0	7.9	11.7	6.8	8.2		100
July.....	8.6	14.2	2.3	35.4	5.9	.8	8.3	11.1	6.7	6.7		100
August.....	4.6	10.8	1.8	44.5	7.4	.9	8.7	9.9	7.3	4.3		100
September.....	3.9	6.8	1.1	47.1	7.9	1.1	9.0	9.1	8.9	5.1		100
October.....	1.5	4.8	.8	43.9	11.5	1.6	10.8	9.4	9.4	6.3		100
November.....	.5	3.4	.7	44.8	10.3	1.7	13.7	8.9	9.7	6.3		100
December.....	.2	2.5	.5	44.9	9.8	1.8	14.3	10.4	8.1	7.5		100
1920.												
January.....	.2	2.4	40.5	42.9	10.3	2.1	13.3	9.9	10.2	7.2		100
February.....		.6	.1	40.0	7.8	2.7	13.0	12.7	10.6	11.4	0.7	100
March.....		2.0		36.2	7.4	3.0	16.8	11.9	9.2	10.0	1.4	100
April.....		1.8		40.3	7.5	2.8	16.0	11.4	9.0	9.5	1.7	100
May.....		1.9		40.5	10.5	3.2	16.1	10.3	7.5	7.1	2.9	100
June.....		1.4		39.6	10.4	3.04	16.21	10.7	8.81	6.71	2.9	100



TABLE IV.—Direct service lines to South America and Central America, arranged by districts and ports of origin and destination—Continued.  
[Data as of June 30, 1920.]

United States districts and ports.	South America, west coast.										Central America.												
	Antofagasta.		Callao.		Iquique.		Valparaiso.		Total.		Cartagena.		Colon.		Puerto Barrios.		Total.		Grand total.				
	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.	Num-ber.	Dead-weight tons.			
ATLANTIC.																							
Baltimore.....																							
Boston.....																							
Jacksonville.....																							
New York.....	2	14,800							2	14,800										9	63,355		
Norfolk.....	13	70,690							19	105,611										6	37,875		
Philadelphia.....	2	10,875							3	15,075										40	289,534		
Portland, Me.....	1	4,200							1	4,200										33	206,379		
Savannah.....																				13	88,823		
Wilmington.....									1	4,050										4	26,300		
Total.....	18	100,415	2	8,340	4	21,451	1	9,330	25	139,836	4	16,200							4	16,200	108	728,416	
GULF.																							
Gulport.....																							
Mobile.....																							
New Orleans.....	3	12,150							3	12,150	1	2,940								2	6,980	11	50,440
Pensacola.....																				1	4,050	2	8,757
Total.....	3	12,150							3	12,150	1	2,940								1	4,050	2	6,980
PACIFIC.																							
Portland, Oreg.....	1	5,350							1	3,000													
Seattle.....																							
Tacoma.....	1	9,400							1	9,400													
Total.....	2	14,750							2	12,330	2	12,330	1	4,050						1	4,050	2	13,450
Grand total.....	23	127,315	2	8,340	4	21,451	2	12,330	31	169,436	5	19,140	1	4,050	1	4,050	1	4,050	7	27,240	135	863,191	
Number of lines.....		7		2		1		2		12		2								4		4	

## 256 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

TABLE V.—Vessels operating in trades which do not have United States ports as terminals.

STEEL.		
Vessel.	Dead-weight tons.	Service allocated.
<b>STEEL.</b>		
Egremont.....	9,500	Calcutta/Oran.
Oskawa.....	9,400	Havre/Hamburg/Plate.
Gulmba.....	9,400	Do.
Yamhill.....	6,300	Do.
Monasses.....	5,409	Do.
Puget Sound.....	7,500	Plate/Hamburg.
Lake Fabyan.....	4,155	Singapore/Calcutta.
Western Star.....	8,698	Montreal/Antwerp.
Aledo.....	7,300	Do.
Western Maid.....	8,594	Do.
Oakland.....	9,330	Do.
Western Plains.....	8,594	Do.
Afel.....	7,825	Do.
West Chatala.....	8,438	Calcutta/Italy.
Gunston Hall.....	9,400	Buenos Aires/Dunkirk.
Houma.....	10,000	Tampico/Brest.
Louisville Bridge.....	5,075	Progresso/United Kingdom/Havre.
Castletown.....	5,000	West Indies/Mexican ports/European continental ports.
Dade County.....	5,075	Do.
Chickamauga.....	6,000	Palo Alto/Cuba/Lauskrona, Sweden.
Cadaretta.....	3,694	Oriental Feeder Service.
Glymont.....	3,701	Do.
Lake Farrar.....	4,050	Do.
Lake Onawa.....	4,500	Do.
Doylestown.....	3,702	Shanghai/Hongkong/Calcutta.
Daddopeak.....	3,800	Do.
Lake Faulk.....	4,050	Do.
Lake Farmingdale.....	4,050	Do.
Lake Gitano.....	4,050	Do.
Lake Fielding.....	4,050	Do.
Lake Gilpen.....	4,050	Do.
Jacox.....	3,696	Do.
Lake Gebhart.....	4,050	Arica, Chile/Honolulu.
Cathlamet.....	8,800	Sydney, Australia/Europe.
Quinnpiac.....	8,800	Buenos Aires/west coast Italy.
West Maximus.....	8,800	Cadiz/St. Johns, Newfoundland.
Moravia Bridge.....	5,075	Uleaborg/Ostend.
Nantahala.....	8,800	River Plate/Barcelona.
Pontia.....	5,075	Porsgrund/Hull.
American Press.....	7,825	Port Talbot, Wales/Alexandria.
Virginia Bridge.....	5,075	Huelva/Hamburg.
Tripp.....	8,800	Saigon, China/Cuba.
West Segovia.....	8,800	Saigon, China/Antwerp.
Winona County.....	9,600	Delagoa Bay/Port Said/Oran/Marseille.
Daniel Webster.....	12,500	Bahia Blanca/United Kingdom/Gibraltar.
Eastern Cross.....	6,800	Glasgow/Liverpool/Bombay.
Berwyn.....	7,381	Karachi/Antwerp.
Lake Gakona.....	3,525	Port Hastings, Nova Scotia/Norway.
Chamberino.....	3,670	Skelleftea, Sweden/Preston, England.
Ingold.....	5,357	Blythe/Copenhagen.
Jakyl.....	5,182	Trangsund, Sweden/Alexandria.
Tonesit.....	5,075	Rafso/Dunkirk.
West Pocasset.....	8,800	Constantinople/England.
Lake Fernando.....	4,050	Port Talbot/Aalborg.
Calno.....	5,075	Frederickshamn/Hartlepool or Sunderland.
Schoodic.....	7,825	Manchester/West Africa.
West Saginaw.....	8,800	Do.
<b>WOOD.</b>		
Musketo.....	3,875	United Kingdom/Scandinavia.
Ahala.....	3,575	Nova Scotian ports/United Kingdom.
Manada.....	3,688	Do.
Firth Cliffe.....	8,822	Calcutta/Singapore (to make 2 consecutive trips).
Assinippi.....	5,259	River Plate/Barcelona.
Neuse.....	6,890	Kotka/Dunkirk.
Lake Gлта.....	4,155	Swansea/Denmark.
Mojave.....	3,688	Swansea/Copenhagen.
Aspenhill.....	3,565	Swansea/Alexandria.
Kasoti.....	3,870	Swansea/Marseille.
Ovatama.....	3,688	Swansea/Lisbon.
Lake Gratis.....	4,165	Frederickshamn/United Kingdom.
Opelika.....	5,075	Porsgrund, Norway/United Kingdom.
Moraine.....	3,688	Cardiff/Malta.
Brompton.....	3,666	Wales/Malta.
Bloxif.....	3,870	Tyne, England/Copenhagen.

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 257

TABLE V.—Vessels operating in trades which do not have United States ports as terminals—Continued.

STEEL—Continued.

Vessels.	Dead-weight tons.	Service allocated.
WOOD—continued.		
Aimwell.....	3,416	Blythe, England/Aarhus, Denmark.
Capines.....	3,575	Bona, Algeria/Cork or Hull.
Caribou.....	4,005	Port Breira, Algeria/Newcastle or Tyne.
Dardania.....	3,575	Cartagena, Spain/Garston.
Midget.....	660	Philippine interisland.
Grand total (78 vessels).	461,695	

TABLE VI.—Managers and/or operators, by classes.

STEEL TONNAGE.

Class and managers and/or operators.	Dead-weight tons.	Passengers.
Class No. 1 (350,000 dead-weight tons and over).....		
Class No. 2 (300,000 to 349,999 dead-weight tons):		
Barber Steamship Lines.....	344,197	
Class No. 3 (250,000 to 299,999 dead-weight tons):		
Steele, J. H. W., & Co.....	263,993	
Class No. 4 (200,000 to 249,999 dead-weight tons):		
American Line.....	163,516	37,000
Munson Steamship Line.....	186,422	33,980
New York & Cuba Mail Steamship Co.....	216,504	7,050
Total.....	566,442	78,030
Class No. 5 (150,000 to 199,999 dead-weight tons):		
Bull, A. H., & Co.....	158,133	
Cosmopolitan Ship Co.....	186,209	
France & Canada Steamship Corporation.....	153,930	
Livermore, Dearborn & Co.....	157,436	
Moore & McCormack (Inc.).....	150,920	
Pacific Mail Steamship Co.....	179,946	
Pacific Steamship Co.....	178,791	
Strachan Shipping Co.....	178,456	
Struthers & Dixon.....	154,836	
Williams, Dimond & Co.....	154,186	
Total.....	1,649,843	
Class No. 6 (100,000 to 149,999 dead-weight tons):		
Green Star Steamship Co.....	111,267	
Harriss, Macgill & Co.....	115,385	
International Freighting Corporation.....	121,090	
Kerr Steamship Corporation.....	121,913	
Lykes Bros.....	105,458	
Oriental Navigation Co.....	119,452	9,600
Red Star Line.....	140,282	
United States & Australia Steamship Co.....	124,944	8,500
United States Transport Co.....	109,200	
Total.....	1,069,491	18,100
Class No. 7 (50,000 to 99,999 dead-weight tons):		
American Shipping Corporation.....	74,128	
Atlantic Transport Co.....	99,711	
Baltimore Oceanic Steamship Co.....	53,022	
Baltimore Steamship Co.....	55,346	
Black Diamond Steamship Co.....	74,745	
Blake, W. A., & Co.....	54,204	
Columbia Pacific Ship Co.....	63,400	
Dollar, Robert & Co.....	58,645	
Elwell, J. W., & Co.....	70,238	
Emery, J. S., & Co.....	61,821	
General Steamship Co.....	50,010	
Luckenbach Steamship Co.....	72,842	
Mallory, C. D., & Co.....	60,427	
Mississippi Shipping Co.....	58,241	
National Shipping Corporation.....	53,851	

TABLE VI.—Managers and/or operators, by classes—Continued.

Class and managers and/or operators.	Dead-weight tons.	Passengers.
<b>Class No. 7 (50,000 to 99,999 dead-weight tons)—Continued.</b>		
New York & Argentine Steamship Co.....	59,900	
Rapora! Steamship Co.....	57,884	
Sgiteovich, S., & Co.....	86,194	
Sigsbee, Humphrey & Co.....	53,858	
South Atlantic Maritime Corporation.....	52,665	
Sprague, C. H., & Son.....	86,906	
Sudden & Christenson.....	51,256	
Texas Transportation & Terminal Co.....	93,415	
Thordyke, Trenholme & Co.....	52,882	
Tracy, M. H., & Co.....	74,450	
United States & Brazil Steamship Line.....	50,497	
Waterhouse, Frank, & Co.....	79,900	
West India Steamship Co.....	59,133	
Williamson & Rauers.....	75,459	
Winchester, J. H., & Co.....	72,525	
<b>Total.....</b>	<b>1,967,355</b>	
<b>Class No. 8 (25,000 to 49,999 dead-weight tons):</b>		
Atlantic Chartering Co.....	28,198	
Atlantic Gull & Pacific Steamship Corporation, of Baltimore.....	34,976	
Atlantic & Pacific Steamship Co.....	37,428	
Callaghan, Atkinson & Co.....	28,486	
Carolina Co.....	34,939	
Clyde Steamship Co.....	28,005	
Coastwise Transportation Co.....	36,427	
Crowell & Thurlow.....	29,164	
Cummins, A. D. & Co.....	29,294	
Earn Line Steamship Co.....	39,875	
Evans, E. C., & Sons.....	27,600	
Export Steamship Corporation.....	47,925	
Export Transportation Co.....	27,575	
French American Line.....	27,781	
Gaston, Williams & Wigmore.....	40,177	
General Navigation Co.....	39,875	
Grace, W. R., & Co.....	30,320	5,325
Hasler, Robert Co.....	38,629	
Hasler Brothers (Inc.).....	25,960	
Los Angeles Pacific Navigation Co.....	35,200	
Mallory Steamship Co.....	33,484	
Matson Navigation Co.....	49,350	
McCormick & McPherson.....	37,214	
Merchants Navigation Co.....	31,560	
Merritt, J. A., & Co.....	29,625	
New York & Porto Rico Steamship Co.....	39,238	
Page & Jones.....	31,495	
Potter Transportation Co.....	26,400	
Richards, C. B., & Co.....	26,225	
Seager Steamship Co.....	40,600	
Southern Steamship Co.....	25,485	
Sprunt, Alex. & Son.....	27,575	
States Marine & Commercial Co.....	27,187	
Swayne & Hoyt.....	32,600	
Tampa Inter-Ocean Steamship Co.....	44,545	
Trosdal, Plant & LaFonta.....	30,875	
United Fruit Co.....	42,372	
United Steamship Co.....	39,264	
Warren Transportation Co.....	32,000	
Waterman Steamship Co.....	47,788	
Wessel, Duval & Co.....	43,760	
Windward Island Line.....	32,840	
<b>Total.....</b>	<b>1,437,336</b>	<b>5,325</b>
<b>Class No. 9 (0 to 24,999 dead-weight tons):</b>		
American Metal Transport Co.....	13,751	
Baltimore & Carolina Steamship Co.....	3,364	
Blue Star Navigation Co.....	8,310	
Campbell, A. R., & Co.....	7,825	
Caribbean Steamship Co.....	11,625	
Elder Stell Steamship Co.....	8,700	
Gilmartine Co.....	4,050	
Grandfield, W. J., & Son.....	5,075	
Gulf Export & Transportation Co.....	4,050	
Gulf & Southern Steamship Co.....	8,400	
International Maritime Corporation.....	9,125	
Intercoast Steamship Co.....	20,909	
Jacksonville Shipping Corporation.....	7,565	
Jorkes Steamship Co.....	8,100	



FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 259

TABLE VI.—Managers and/or operators, by classes—Continued.

Class and managers and/or operators.	Dead-weight tons.	Passengers.
<b>Class No. 9 (0 to 24,999 dead-weight tons)—Continued.</b>		
Lind Navigation Co.....	17,954	
Lowrance & Co.....	10,150	
Merchants & Miners Transportation Co.....	4,200	
Mobile Liners (Inc.).....	10,150	
New England Fuel & Transportation Co.....	14,975	
New Orleans & South American Steamship Co.....	15,025	
North Atlantic & Western Steamship Co.....	16,433	
Northern Steamship Co. (Inc.).....	19,821	
Norton, Lilly & Co.....	18,262	
Oceanic Navigation Co. (Inc.).....	4,000	
Oceanic Steamship Co.....	8,000	
Paragon Shipping Corporation.....	8,100	
Patterson, Graham & Co.....	9,500	
Pandleton Bros.....	12,020	
Phelps Bros.....	11,000	
Pioneer Steamship Co.....	8,000	
Port Arthur, Texas, Trans-Atlantic Line.....	5,075	
Ripley, Daniel & Co.....	15,150	
Rogers & Webb.....	13,075	
Seaboard & Gulf Steamship Co.....	23,073	
Smith & Terry (Inc.).....	5,075	
Spice, W. F., & Co.....	5,422	
States Marine Co. of Baltimore.....	14,007	
Susquehanna Steamship Co.....	19,038	
Terminal Shipping Co.....	24,039	
Tropical Steamship Co.....	16,000	
United Transportation Co.....	9,048	
Van Heynigan Brokerage Co.....	16,050	
Wells, George H., & Co.....	9,000	
Western Steamship Co.....	6,038	
Whitney, J. F., & Co.....	18,704	
Wiest, W. R., & Co.....	15,050	
Williams Steamship Co.....	10,000	
Wyman Steamship Co.....	11,075	
<b>Total.....</b>	<b>570,881</b>	
<b>Class No. 10 (tugs and barges):</b>		
Tugs, 27; barges, 2.		
<b>Class No. 11 (steel tonnage under charter):</b>		
Tonnage charter—		
Atlantic Fruit Co.....	2,875	
United Fruit Co.....	21,375	
<b>Total.....</b>	<b>24,250</b>	
<b>Bare boat—</b>		
American Merchant Mariners (Inc.).....	5,075	
Baltimore & Carolina Steamship Co.....	2,875	
Bull Insular Steamship Co.....	3,293	
Farragut Steamship Co.....	4,050	
Fos, Victor S.....	18,050	
French American Line.....	20,926	
Italian Star Steamship Line.....	7,825	
International Bureau of Supplies.....	19,860	
International Maritime Corporation.....	4,050	
Luckenbach Steamship Co.....	10,076	
Pioneer Steamship Co.....	23,150	
Standard Steamship Co.....	7,433	
Wyman Steamship Co.....	52,026	
United States Mail Steamship Co.....	20,300	
<b>Total.....</b>	<b>198,989</b>	
<b>Steel tankers managed and/or operated.....</b>	<b>690,437</b>	

## PART IV.—UNITED STATES SHIPPING BOARD EMERGENCY FLEET CORPORATION, MISCELLANEOUS SECTION.

## EXHIBIT A.—Consolidated balance sheet as at June 30, 1920.

Item No.	ASSETS.	LIABILITIES, ETC.
	CURRENT ASSETS.	CURRENT LIABILITIES.
1.	General cash and cash funds (schedule 1).....	
2.	Accounts receivable (schedule 2).....	
3.	Notes receivable.....	
4.	Advances to contractors.....	
5.	Investments (schedule 3).....	
6.	Materials, supplies, ship stores, etc. (schedule 4).....	
	Total current assets.....	Total current liabilities.....
	\$638,267,749.31	\$69,281,947.71
	CAPITAL ASSETS.	CAPITAL LIABILITIES.
7.	Purchases, construction, and reconditioning expenditures: Owned vessels (schedule 5).....	
8.	Plants, property and equipment, fuel-oil stations, real estate and buildings, furniture and fixtures, mechanical office equipment, automobiles, launches, etc. (schedule 6).....	
9.	Construction of, improvements to, etc., housing projects and transportation facilities (schedule 7).....	
	Total capital assets.....	Total capital liabilities.....
	2,899,112,977.63	2,090,400.00
	Total.....	Total.....
	3,537,380,726.94	3,537,380,726.94
		CAPITAL LIABILITIES.
15.		Mortgage payable.....
16.		First mortgage bonds on shipbuilding plants.....
		Total capital liabilities.....
		130,400.00
		Total.....
		2,500,000.00
17.		Total capital liabilities.....
18.		Appropriations (schedule 8).....
		Reserves (schedule 9).....
		Total.....
		2,090,400.00
		3,218,217,101.66
		735,618,316.96
19.		Net outcome of all transactions by classes of activities from inception to June 30, 1920 (Exhibit B).....
		Total.....
		4,050,746,866.13
		518,366,139.19

EXHIBIT B.—Statement to show outcome of all transactions, by classes of activities, from inception to June 30, 1940.

SUMMARY.

	Classes of activities.						
	Total.	Operations of vessels.	Construction of vessels.	Sale of vessels.	Housing projects.	United States Shipping Board.	Other activities.
Revenues from operations, sales, etc. (section 1).....	\$1,148,928,185.24	\$817,271,541.66	\$27,211,396.53	\$296,515,244.48	\$3,009,394.64	\$4,920,478.08	.....
Less expenses, etc. (section 2).....	1,662,294,294.53	1,002,366,579.04	270,599,176.14	339,083,876.32	2,419,172.62	10,667,894.68	.....
Net outcome of all transactions (to Exhibit A).....	513,368,139.19	185,125,087.38	243,369,779.61	42,868,331.84	690,222.12	5,767,416.65	\$37,114,795.83

EXHIBIT B.—Statement to show outcome of all transactions, by classes of activities, from inception to June 30, 1920—Continued.

SECTION 1.

Item.	Revenues from operations, sales, etc.	Total.	Classes of activities.					United States Shipping Board.	Other activities.
			Operations of vessels.	Construction of vessels.	Sales of vessels.	Housing projects.	Sales of vessels.		
A	Voyage revenues.....	\$788,077,700.11							
B	Charter revenues.....	44,718,668.17							
C	Bunkering coal, etc.....	352,542.48							
D	Commissions.....	954,880.84							
E	Slop chest.....	69,374.69							
F	Interest.....	514,003.14		\$2,747,644.67					
G	Discounts.....	170,584.79		51,027.21			\$14,486.97		
H	Foreign exchange.....	1,149,900.01							
I	Recruiting service.....	153,633.14							
J	Other revenues.....	925,394.99							
K	Rentals.....	1,487,607.67					1,487,607.67		
L	Sales of vessels: (1) Owned..... (2) Seized.....				298,772,469.34				
	Total sales of vessels.....	298,772,469.34			24,422,226.00				
M	Sales of wharfs.....	258,347.78							
N	Sales of houses.....	1,497,290.00					1,497,290.00		
O	Sales of cargoes of Dutch vessels.....	4,810,171.74						\$4,810,171.74	
P	Other sales.....	24,707,910.34		188,205.80					110,306.26
	Total revenues from operations, sales, etc. (to summary).....	1,148,928,155.34	817,271,541.66	27,211,396.53	296,515,344.48	3,009,394.64	4,920,478.03		

SECTION 2.

Item.	Expenses, etc.	Total.	Classes of activities.					United States Shipping Board.	Other activities.
			Operation of vessels.	Construction of vessels.	Sale of vessels.	Housing project.	Sale of vessels.		
A	Voyage expenses.....	\$328,527,999.83							
B	Charter hire.....	208,366,501.88							

C	General expenses!	24,441,029.38	21,449,430.53	\$19,737.03	\$845,569.77	\$2,126,292.05
D	Insurance	140,398,528.94	140,398,528.94			
E	Depreciation	209,465,323.07	200,744,592.43	8,720,731.24		
F	Maintenance, etc. <sup>1</sup>	86,321,576.86	86,321,576.86			
G	Stipulation expense	3,406,337.69	3,406,337.69			
H	Recruiting service	13,247,610.88	13,247,610.88			
I	Cost of vessels sold:					
	(1) Owned			315,323,748.85		
	(2) Seized			4,131,932.01		
	(3) Other cost of vessels			9,196,211.74		
J	Total cost of vessels sold	328,754,912.60				
K	Construction charges and delay in delivery	29,000.00		29,000.00		
L	Losses not covered by insurance	525,000.00		525,000.00		
M	Commissions	348,383.90		348,383.90		
N	Interest	882,801.47		392,801.15		
O	Cash discounts	1,573,602.75		293,110.77		
P	Cost of houses sold	1,573,602.75			1,573,602.75	
Q	Advances and expenses for account of Dutch vessels	8,561,602.63				8,561,602.63
	Expenses applicable to other sales:					
	(1) Expense			\$3,584,841.64		
	(2) Costs			13,551,051.31		
R	Shrinkage of vessels	17,135,892.95				
	Total expense applicable to other sales					
S	Shrinkage due to appraisal:					
	(1) Vessels	17,450,144.12				
	(2) Materials	78,465,631.91				
	(3) Housing materials	2,122,731.45				
	Total shrinkage due to appraisal	98,038,507.48				
T	Contract cancellations:					
	(1) Vessels	84,454,219.19				
	(2) Machinery	20,722,592.28				
	Total contract cancellation	105,176,811.47				
	Vessels lost:					
	(1) Prior to operations					\$1,769,118.30
	(2) In service of Army and Navy—					
	(a) Vessels					16,496,893.73
	(b) Depreciation					18,848,783.80
U	Total vessels lost	37,114,795.83				
	Undistributed construction	50,240,964.24				
	Charges	1,662,294,294.53				
	Total expenses (to summary)	1,002,396,579.04	1,002,396,579.04	339,083,976.32	2,419,172.52	10,687,894.68
						37,114,795.83

<sup>1</sup> Includes salaries and expenses, etc.

\* Includes bulkheading, etc.

264 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

SCHEDULE 1.—Statement of general cash and cash funds as at June 30, 1920.

General cash:	
(a) In United States Treasury.....	\$56,244,906.58
(b) In banks.....	710,074.01
(c) In transit.....	10,420,817.05
<b>Total general cash.....</b>	<b>\$67,375,797.64</b>
Cash funds:	
(d) Imprest.....	15,311,586.26
(e) Insurance.....	7,003,772.37
(f) Working.....	681,980.47
(g) Recruiting service.....	741,628.53
(h) Treasurer's revolving.....	878,242.04
(i) In escrow for restrictions against vessels.....	639,177.12
(j) Trust, for ship construction.....	333,788.30
(k) Special.....	3,581,979.00
<b>Total cash funds.....</b>	<b>29,172,154.09</b>
<b>Total general cash and cash funds (to Exhibit A).....</b>	<b>96,547,951.73</b>

SCHEDULE 2.—Statement of accounts receivable as at June 30, 1920.

Item.	Billed.	Unbilled.	Other items.	Total.
<b>A</b>	<b>Accounts receivable:</b>			
	<b>Foreign Governments—</b>			
France.....	\$7,748,605.38	\$316,746.80	\$680,000.00	\$8,745,352.18
French High Commission..	286,541.75	.....	.....	286,541.75
Italy.....	309,516.88	238,208.59	.....	547,725.47
Russia.....	26.01	24,990.88	.....	25,016.89
Commission for Czecho-Slovaks.....	1,383,782.22	56,512.78	.....	1,440,295.00
Switzerland.....	5,354.93	65,699.13	.....	71,054.06
Siam.....	4,960.92	9,366.00	.....	14,326.92
Holland.....	.....	1,712.28	.....	1,712.28
Sweden.....	.....	12,456.98	.....	12,456.98
Denmark.....	.....	1,052.97	.....	1,052.97
Great Britain.....	892,147.24	4,020,484.90	.....	4,912,632.14
<b>Total accounts receivable, foreign Governments.....</b>	<b>10,630,935.33</b>	<b>4,747,231.31</b>	<b>680,000.00</b>	<b>16,058,166.64</b>
<b>B</b>	<b>War, Navy, and other United States Government departments—</b>			
War.....	19,551,429.44	11,563,526.17	6,685,396.69	37,800,352.30
Navy.....	718,179.05	1,815,702.58	20,395.50	2,554,277.13
Railroad Administration..	1,146.23	99,400.89	.....	100,547.12
Philippine Islands.....	752.87	35,515.15	.....	36,268.02
State.....	14,650.83	10,104.48	.....	24,755.31
Federal employees compensation.....	542.93	808.46	.....	1,351.39
Treasury.....	.....	228.00	.....	228.00
United States customs, New York.....	.....	.....	625.00	625.00
<b>Total accounts receivable, War, Navy, and other United States Government departments.....</b>	<b>20,286,701.35</b>	<b>13,525,285.73</b>	<b>6,706,417.19</b>	<b>40,518,404.27</b>
<b>C</b>	<b>Other accounts receivable—</b>			
(1) Panama Railroad Co....	.....	92,079.17	.....	92,079.17
(2) American Red Cross....	184,289.49	157,997.87	.....	342,287.36
(3) Belgian relief.....	296,179.28	196,795.46	.....	492,974.74
(4) Freight claims.....	.....	.....	74,041.69	74,041.69
(5) Cash advances to employees.....	.....	.....	15,496.35	15,496.35
(6) In suspense, ships under charter hire.....	.....	.....	41,395,388.53	41,395,388.53
(7) In suspense, ships reconveyed at cost.....	.....	.....	6,198,742.69	6,198,742.69

FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 265

SCHEDULE 2.—Statement of accounts receivable as at June 30, 1920—Contd.

Item.	Billed.	Unbilled.	Other items.	Total.
Accounts receivable—continued.				
Other accounts receivable—continued.				
(8) Interest purchased on Liberty loan bonds.....			\$3,334.58	\$3,334.58
(9) Interest receivable.....			125,476.58	125,476.58
(10) Operators' accounts.....		\$62,998,736.34		62,998,736.34
(11) Sundry debtors.....	\$1,321,561.21	1,474,181.49	122,681,686.50	125,477,429.20
Total other accounts receivable.....	1,802,029.98	64,919,790.33	170,494,166.92	237,215,987.23
Total accounts receivable (to Exhibit A)....	32,719,666.66	83,192,307.37	177,880,584.11	293,792,558.14

SCHEDULE 3.—Statement of investments as at June 30, 1920.

Item.	
A. Mortgages:	
Notes due on mortgage.....	\$5,625,000.00
Mortgage loans.....	11,408,728.00
Other mortgages receivable.....	575,744.27
Total mortgages.....	\$17,609,472.27
B. United States Liberty bonds.....	1,132,057.50
C. Loans to contractors building dry docks and marine railways.....	11,289,098.09
D. Other investments.....	886,960.00
Total investments (to Exhibit A).....	30,917,587.86

SCHEDULE 4.—Statement of materials, supplies, ship stores, etc., as at June 30, 1920.

Item.	
A. Inventories, current property, etc.:	
1. Inventories.....	\$119,102,855.85
2. Current property.....	13,787,372.04
3. Lumber storage yards.....	1,524,495.27
Total inventories, current property, etc.....	\$134,414,723.16
B. Stationery, supplies, etc.:	
Stocks.....	179,302.02
C. Otter gear:	
Inventories.....	371,765.20
D. Machinery construction:	
1. Under construction.....	4,965,078.54
2. Machinery.....	617,196.11
3. Requisitioned turbines.....	8,232,758.68
Total machinery construction.....	13,815,033.33
E. Vessel slop chest.....	43,348.18
F. Coal and fuel oil.....	1,221,770.54
G. Surplus and salvage:	
Property, appraisal suspense.....	26,861,202.78
H. Supply sales:	
Property.....	2,115,861.66
I. Not otherwise classified:	
Property.....	3,600,000.00
Total materials, etc.....	182,623,006.87
J. Less suspense:	
1. Certified materials.....	\$3,551,580.67
2. Cancellation.....	671,128.55
Total suspense.....	39,222,709.22
Net materials, supplies, ship stores, etc. (to Exhibit A)....	143,400,297.65

266 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

SCHEDULE 5—*Statement of purchase, construction, and reconditioning expenditures on owned vessels as at June 30, 1920.*

Item.

A. Purchased vessels:		
American vessels.....	\$1,447,088.51	
Austrian vessels.....	10,397,510.91	
Japanese vessels.....	30,625,982.00	
Total purchased vessels.....		\$42,470,581.42
B. Requisitioned lake and other vessels afloat.....		31,502,787.19
C. Requisitioned on ways and completed by Emergency Fleet Corporation.....		462,528,360.60
D. Contracted for by Emergency Fleet Corporation:		
1. Steel vessels.....	\$1,791,921,226.70	
2. Wood and composite vessels.....	274,130,346.89	
3. Concrete vessels.....	16,807,476.90	
4. Tugs and barges.....	44,532,525.43	
Total contracted for by Emergency Fleet Corporation....		2,127,391,575.92
Not allocated to specific class of vessels.....		6,719,450.68
Total purchase, construction, and reconditioning expenditures on owned vessels (to Exhibit A).....		2,670,612,755.81

SCHEDULE 6.—*Statement of plants, property and equipment, fuel-oil stations, real estate and buildings, furniture, fixtures, mechanical office equipment, automobiles, launches, etc., as at June 30, 1920.*

Item.

(A) Plants, property, and equipment:		
Property (includes real estate, buildings, railroad and floating equipment, shipways) and equipment (includes office furniture and fixtures, automobile trucks, etc., launches, restaurant, and equipment).....		\$154,579,175.05
(B) Fuel-oil stations.....		283,460.56
(C) Real estate and buildings:		
Land and buildings (includes building located at 45 Broadway, New York).....	\$2,000,000.00	
Station buildings of the Sea Training Bureau at Camp Stuart, San Francisco, and Seattle	40,273.64	
Total real estate and buildings.....		2,040,273.64
(D) Furniture, fixtures, mechanical office equipment, automobiles, launches, etc.:		
(1) Furniture, fixtures, mechanical office equipment, etc.....	1,833,074.44	
(2) Automobiles and launches.....	159,260.30	
Total furniture, fixtures, mechanical office equipment, automobiles, launches, etc.....		1,992,334.74
Total plants, property and equipment, fuel-oil stations, real estate and buildings, furniture, fixtures, mechanical office equipment, automobiles, launches, etc. (to Exhibit A).....		158,895,243.99

SCHEDULE 7.—*Statement of construction of, improvements to, etc., expenditures on housing projects and transportation facilities as at June 30, 1920.*

Item.

(A) Housing projects:		
Includes mortgage contracts, income from operations, unclaimed wages, sale of houses, inventory, accounts receivable, interest and revenue, furniture, etc.....		\$66,682,230.43
(B) Transportation facilities.....		2,922,747.40
Total construction of, improvements to, etc., expenditures on housing projects, and transportation facilities..		69,604,977.83



FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 267

SCHEDULE 8.—Statement of appropriations, allotments, and unexpended balances thereof, less transfers therefrom, to show net amount received from appropriations and allotments as at June 30, 1920.

Item.	Appropriated.	Unexpended appropriation balances.	Net received.
<b>A Appropriations:</b>			
(1) Permanent funds .....	\$50,000,000.00		\$50,000,000.00
(2) Emergency shipping fund .....	3,203,201,000.00	\$62,872,449.19	3,140,328,550.81
(3) Increase of compensation .....	4,633.71		4,633.71
(4) Salaries and expenses, 1917 .....	74,404.67		74,404.67
(5) Salaries and expenses, 1918 .....	517,500.00	152,494.11	365,005.89
(6) Salaries and expenses, 1919 .....	842,500.00	8,598.75	833,901.25
(7) Salaries and expenses, 1920 .....	772,986.00	337,693.89	435,292.11
<b>Appropriation, total .....</b>	<b>3,255,413,024.38</b>	<b>63,371,235.94</b>	<b>3,192,041,788.44</b>
	<b>Allotted amounts.</b>	<b>Unexpended allotment balances.</b>	<b>Net received.</b>
<b>B Allotments:</b>			
(1) National security and defense, 1918...	27,011,682.84	3,941,171.32	23,070,511.52
(2) National security and defense, 1919...	2,500,743.43	535,941.83	1,964,801.60
<b>Allotment totals .....</b>	<b>29,512,426.27</b>	<b>4,477,113.15</b>	<b>25,035,313.12</b>
<b>Appropriation and allotment totals .....</b>	<b>3,284,925,450.65</b>	<b>67,848,349.09</b>	<b>3,217,077,101.56</b>
<b>C Less:</b>			
Transfers to War Department under Executive order of Mar. 12, 1919 .....			3,860,000.00
<b>Total receipts from appropriations and allotments, less transfers .....</b>			<b>3,213,217,101.56</b>

SCHEDULE 9.—Statement of reserves as at June 30, 1920.

Item.			
	<b>Reserved for—</b>		
(A)	<b>Depreciation:</b>		
	(1) Vessels .....	\$196,847,309.83	
	(2) Plants, property, and equipment ..	586,011.02	
	(3) Furniture, fixtures, mechanical office equipment, etc .....	492,688.65	
	(4) Automobiles and launches .....	46,286.53	
	<b>Total reserve for depreciation .....</b>		<b>\$197,972,296.03</b>
(B)	<b>Maintenance .....</b>		<b>17,708,490.67</b>
(C)	<b>Reconditioning steamship <i>Saranac</i> and steamship <i>Quinnabaug</i> .....</b>		<b>863,941.04</b>
(D)	<b>Stipulations .....</b>		<b>3,406,337.69</b>
(E)	<b>Insurance:<sup>1</sup></b>		
	(1) Marine, etc .....	\$75,836,046.46	
	(2) Other insurance .....	18,751,947.57	
	<b>Total reserve for insurance .....</b>		<b>94,587,994.03</b>
(F)	<b>Vessels sold:</b>		
	(1) Owned .....	336,349,279.42	
	(2) Seized .....	4,110,777.00	
	<b>Total reserve for vessels sold .....</b>		<b>340,460,056.42</b>
(G)	<b>Vessels lost:</b>		
	(1) Owned .....	48,219,725.74	
	(2) Seized .....	538,492.68	
	<b>Total reserve for vessels lost .....</b>		<b>48,758,218.42</b>

<sup>1</sup> This item represents premiums written, less unexpired premiums and insurance losses and expenses.

**268** · FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

(H) Other reserves:

(1) Awards to former owners and requisitioned and other ships owned.....	\$14,860,677.04
(2) Other accidents.....	15,727,269.94
(3) Contract payments.....	973,270.11
(4) Otter gear.....	140,668.05
(5) Miscellaneous (freight claims, etc.)...	159,097.42
Total other reserves.....	<u>\$31,860,982.56</u>
Total reserves (to Exhibit A).....	<u>735,618,316.86</u>

EXHIBIT C.—Statement of receipts and withdrawals from appropriation and allotment accounts in the United States Treasury for fiscal year June 30, 1920.

	Salaries and expenses, 1918.	Salaries and expenses, 1919.	Salaries and salaries, 1920.	National security and defense, 1918.	National security and defense, 1919.	Emergency shipping fund.	Total.
Unexpended balance of appropriations as at June 30, 1919.....	\$174,687.40	\$11,185.85		\$5,292,075.55	\$177,866.09	\$173,409,806.93	\$179,465,621.82
Receipts:							
Cash refunds.....						356,500,000.00	357,272,986.00
Additional appropriations granted: Sundry civil act of July 19, 1919.....			\$772,986.00				
Refunds by the Emergency Fleet Corporation—							
Account of payments made for its accounts.....	4,816.99	102,519.63	70,470.76	3,449,614.47	61,622.69	1,106,845.69	
Revenue received from Division of Operations, Emergency Fleet Corporation.....						155,000,000.00	
Proceeds of vessels sold.....						51,418,389.84	
Proceeds of sale of wireless equipment (on board vessels), miscellaneous stores material, and supplies.....	4.05	406.00	1,354.52	34,032.64	13.43	211,883.91	
Miscellaneous cash refunds.....						2,447,223.53	
Total cash refunds.....	4,821.04	102,925.63	71,825.28	3,483,647.11	61,636.12	210,184,352.97	213,909,238.15
Recoveries of expenditures through United States Treasury Department certificates of transfer settlement.....		1,090.00	834.65	666.20		9,546,566.47	9,549,157.32
Total receipts.....	4,821.04	104,015.63	845,675.93	3,484,313.31	61,636.12	576,230,919.44	580,731,381.47
Grand total.....	179,508.44	115,201.48	845,675.93	8,776,388.86	639,502.21	749,640,726.37	760,197,003.29
Withdrawals:							
Disbursing officer's requisitions for cash.....		100,000.00	494,000.00	85,000.00	100,000.00	8,388,700.69	9,167,700.69
Advances to the Emergency Fleet Corporation.....						675,500,000.00	675,500,000.00
Withdrawals, by the Division of Operations, Emergency Fleet Corporation, of funds recovered by the disbursing officer for its account.....						2,878,990.86	2,878,990.86
Withdrawal of funds through Treasury Department certificates of miscellaneous settlements and claims.....	27,014.33	6,802.73	13,982.04	4,750,217.54	3,560.38	585.63	4,801,962.65
Total withdrawals.....	27,014.33	106,802.73	507,982.04	4,835,217.54	103,560.38	686,766,277.18	692,348,654.20
Unexpended balance of appropriations as at June 30, 1920.....	152,494.11	8,598.75	337,693.89	3,941,171.32	535,941.83	62,872,449.19	67,848,349.09
Grand total.....	179,508.44	115,201.48	845,675.93	8,776,388.86	639,502.21	749,640,726.37	760,197,003.29

<sup>1</sup> Includes appropriation "Investigation of foreign discrimination."

EXHIBIT D.—Cash receipts and disbursements for the fiscal year ended June 30, 1920.

	Salary and expense appropriations.	National security and defense allotments.	Emergency shipping fund.	Total.
Cash balance in United States Treasury, in banks, and on hand, June 30, 1919.....	\$2,967.75	\$57,183.06	\$131,916,009.75	\$131,976,160.56
RECEIPTS.				
Withdrawals from appropriations:				
Disbursing officer, United States Shipping Board.....	594,000.00	185,000.00	8,388,700.69	\$9,167,700.69
Emergency Fleet Corporation—			500,000.00	500,000.00
Division of Operations.....			675,000,000.00	675,000,000.00
Construction Division.....				684,667,700.69
Miscellaneous receipts:				
Disbursing officer, United States Shipping Board (schedule 1).....	179,601.95	3,512,948.95	55,253,238.67	\$3,645,789.57
Emergency Fleet Corporation:				
Construction Division (schedule 2).....			128,621,679.72	128,621,679.72
Division of Operations (schedule 3).....			350,226,268.41	350,226,268.41
Total receipts.....	773,604.95	3,667,948.95	1,218,989,897.49	1,223,461,438.39
	776,569.70	3,755,132.01	1,350,905,897.24	1,356,437,698.95
DISBURSEMENTS.				
Refunded to appropriations:				
From sale of ships and miscellaneous material.....	179,601.95	3,545,283.23	55,184,352.97	\$3,909,238.15
From Division of Operations.....			158,000,000.00	158,000,000.00
Miscellaneous disbursements:				
Disbursing officer, United States Shipping Board (schedule 4).....	573,749.36	192,920.05	8,410,551.62	\$9,177,221.03
Emergency Fleet Corporation—				
Construction Division (schedule 5).....			829,928,893.76	829,928,893.76
Division of Operations (schedule 6).....			223,346,658.30	223,346,658.30
Total disbursements.....	753,351.31	3,738,203.28	1,271,870,456.65	1,276,362,011.24
	23,218.39	16,928.73	79,035,440.59	79,075,587.71
Cash balance in United States Treasury, in banks, and on hand, June 30, 1920.....	776,569.70	3,755,132.01	1,350,905,897.24	1,356,437,698.95

LOCATION OF BALANCES.	June 30, 1919.		June 30, 1920.	
Disbursing officer, United States Shipping Board:				
In United States Treasury.....	\$3,796,060.12	.....	\$3,523,091.20	.....
Emergency Fleet Corporation:				
Construction Division—				
In United States Treasury, Washington office, and districts.....	56,827,520.35	.....	30,131,934.56	.....
In transit.....	5,160,066.62	.....	6,548,438.37	.....
Division of Operations—				
In United States Treasury, Washington office, and districts.....	65,080,296.89	.....	35,528,849.78	.....
In transit.....	1,111,616.58	.....	3,042,073.80	.....
Add interest and other working funds.....		\$131,976,160.56		\$79,075,587.71
		28,899,060.15		17,138,575.72
		180,875,220.71		96,214,163.43

272 FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.

SCHEDULE 10.—*Disbursing officer, miscellaneous receipts July 1, 1919, to June 30, 1920.*

Salaries and wages.....	\$5,280.31
Traveling expense.....	61,947.56
Telegraph, telephone, and cable charges.....	46,917.28
Stationery and printing.....	75,276.31
Office supplies.....	11,716.19
Furniture and fixtures.....	23,752.74
General office expense.....	1,687.04
Mechanical and office equipment.....	14,647.78
Rentals.....	136.74
Repairs to seized German vessels.....	82,033.81
Expenses, Dutch vessel.....	194.13
From Insurance Division for vessel lost.....	1,103,883.33
From War Department for vessels requisitioned.....	278,000.00
Miscellaneous.....	15,071.64
Purchased vessels.....	273.92
Sale of Government property.....	1,946.09
Recoveries from French Government for vessels lost.....	1,793,570.00
Recoveries from Philippine Government for vessels lost.....	370,445.92
Sale of cargoes, Dutch vessels.....	3,367,070.08
Sale of vessels.....	51,570,955.55
Sale of wireless equipment.....	103,080.68
Sale of scrap and miscellaneous material.....	17,902.47
Total.....	58,945,789.57

SCHEDULE 11.—*Division of Construction, miscellaneous cash receipts, July 1, 1919, to June 30, 1920.*

Sale of material.....	\$27,436,599.73
Interest received.....	1,220,628.28
Sale of ships.....	9,852,551.89
Housing sales and revenue.....	782,629.19
Deposits on sales.....	311,250.00
Insurance losses recovered.....	528,832.58
Rentals of machinery, etc.....	812,546.91
Sale of shipyards.....	610,000.00
Penalties account failure to launch hulls.....	36,041.79
Commissary receipts.....	24,440.06
Reduction of loans and mortgages.....	227,796.92
Miscellaneous receipts.....	22,784,968.76
Repairs.....	3,323.46
Material rebilled.....	6,547,167.50
Returns and refunds.....	8,180,391.71
Claim cancellation.....	753,111.79
Imprest funds returned.....	41,862,902.12
Insurance premiums.....	7,608,622.24
Discounts taken.....	37,874.79
Total.....	129,621,679.72

SCHEDULE 12.—*Division of Operations, summary of cash receipts, July 1, 1919, to June 30, 1920.*

Remittances from operators.....	\$246,997,086.98
Accounts receivable, collections.....	101,763,127.77
Refunds on voyage expenses.....	97,209.22
Refunds on general expenses.....	17,989.97
Refunds from supercargoes.....	7,662.50
Refunds from masters.....	292,280.77
Unclaimed wages deposited.....	51,116.77
Alien income tax deposited.....	5,701.73
Reduction of cashier's funds.....	88,490.78
Interest on bank balances.....	328,726.01
Storeroom sales.....	953.85
Reduction of paymaster's funds.....	22,464.12
Discounts.....	119,622.04

## FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD. 273

Slop chest sales.....	\$31,026.74
Refunds on furniture and fixtures.....	707.00
Allotments deposited.....	315.00
Refund on vessel repairs.....	38,495.59
Miscellaneous revenues.....	83,864.60
Address commission.....	119,323.57
Refund of traveling advances.....	41,525.21
Recoveries on New York and Norfolk bulkhead operations.....	75,510.81
Fuel-oil sales.....	28,986.23
Refunds on vessel equipment.....	2,701.39
Refunds on special appropriation disbursements.....	7,229.21
Refunds on transportation expense.....	4,150.60
Total.....	353,226,268.41

## SCHEDULE 13.—Disbursing officer, miscellaneous disbursements July 1, 1919, to June 30, 1920.

Salaries and wages.....	\$367,508.49
Traveling expense.....	35,112.08
Subsistence.....	1,110.40
Postage.....	20.00
Telegraph, telephone, and cable charges.....	42,824.96
Stationery and printing.....	72,807.25
Rentals.....	5,058.00
Office supplies.....	32,045.79
Furniture and fixtures.....	16,405.51
Mechanical office equipment.....	11,345.96
General office expense.....	16,651.28
Expense and repairs, seized German vessels.....	16,849.85
Expense, Dutch vessels.....	149,551.67
Disbursements account of vessels purchased.....	105,502.69
Disbursements account of requisitioned lake and other vessels for construction and repairs, etc.....	1,339,512.48
Compensation paid owners of vessels, recoverable:	
From War and Navy Departments.....	6,284,914.62
From French Government.....	680,000.00
Total.....	9,177,221.03

## SCHEDULE 14.—Division of Construction, miscellaneous cash disbursements July 1, 1919, to June 30, 1920.

Philadelphia office.....	\$478,704.36
Washington office.....	110,474.72
Audited vouchers:	
Construction.....	793,742,406.84
Expense.....	23,564,463.76
Requisitioned ships.....	2,673,969.75
Lumber.....	854.45
Housing.....	1,187,053.66
Miscellaneous disbursements.....	6,891,550.70
Insurance losses, etc.....	1,279,415.52
Total.....	829,928,893.76

## SCHEDULE 15.—Division of Operations, summary of cash disbursements July 1, 1919, to June 30, 1920.

General expenses.....	\$14,228,642.80
Furniture and fixtures.....	261,821.94
Recoverable disbursements.....	22,707,336.24
Vessel repairs.....	53,061,935.36
Charter hire.....	43,506,377.90
Voyage expenses.....	27,461,228.37
Vessel equipment.....	210,962.87
Disbursements account of Division of Insurance.....	7,293,510.65
Transportation expense.....	587,357.30

**274**    **FOURTH ANNUAL REPORT UNITED STATES SHIPPING BOARD.**

Insurance premium.....	\$1,434,226.47
Expenditures from special appropriations.....	132,024.31
Consul advances.....	1,604,262.13
Masters' advances and expenses.....	567,623.35
Supercargoes' advances, expenses, and salaries.....	1,447,487.28
Foreign exchange.....	162,758.51
Coal and fuel-oil purchases.....	772,431.59
Construction disbursements, Manila.....	34,000.00
Construction disbursements, Honolulu.....	126,000.00
Rental and installation fees, submarine signaling apparatus.....	414,884.84
Rental radio equipment.....	861,937.54
Purchase, 45 Broadway, New York.....	2,000,000.00
Payments to operators.....	34,401,478.61
Tugs and lighters expense.....	376,405.81
Unclaimed wage payments.....	48,986.56
Slop chest purchases.....	35,967.07
Alien income tax payments.....	58,676.92
Storeroom inventory purchases.....	449,071.20
War tax payments.....	606.97
Wharf rental.....	7,420.00
Allotment payments.....	48,575.95
Discount refunds.....	558.44
Working funds established.....	190,280.25
Management fees.....	946,592.94
Automobiles.....	1,995.00
Recruiting service.....	2,903,233.13
<b>Total.....</b>	<b>223,346,658.30</b>



## INDEX.

	<b>Page.</b>
Acceptance of vessels, work of Construction and Repair Department...	118-120
Accidents to vessels:	
Statement from July 1, 1919, to June 30, 1920, Appendix Part I, Table III.	
Accounts:	
Cash receipts and disbursements, statement of, Appendix, Part IV, Exhibit D.	
Receipts and withdrawals from in United States Treasury, statement of, Appendix, Part IV, Exhibit C.	
Receivable, statement of, Appendix, Part IV, Schedule 2.	
Ackerson, J. L., vice president in charge of construction, resignation....	77
Administrative problems, advice by Law Department.....	25
Admiralty division:	
Duties .....	25-26
Off hire, legal decisions.....	164
Admiralty suits:	
Act of Mar. 9, 1920.....	27
Mortgages, foreclosure in district courts.....	28
Aeolus (formerly called Grosser Kurfurst), steamer, reconditioning, etc.	126-127
Agamemnon (formerly called Kaiser Wilhelm, 2d), steamer, reconditioning, etc.....	127
Agency yards:	
American International Shipbuilding Corporation.....	103
Merchants' Shipbuilding Co.....	104
Submarine Boat Corporation.....	105
Agents, managing. <i>See</i> Managers and operators.	
Alameda, Calif.: Bethlehem Shipbuilding Corporation, sale of Fleet Corporation interest.....	85
Alien registry. <i>See</i> Transfer of registry.	
Aliens, transfer of registry, supervision, duty of Board.....	14
Allocation and assignment of vessels:	
Ex-enemy vessels.....	125-131
Navy Department.....	30
Tonnage, Appendix, Part III, Table VI.	
War Department.....	30
Work of allocation and assignment section.....	146-147
Allocation and assignment section, history, functions, etc.....	146-148
Allocation section. <i>See</i> Allocation and assignment section.	
America, steamship, history.....	127
American Bureau of Shipping:	
All vessels to be classified by.....	99
Authority granted.....	23
American International Shipbuilding Corporation, ships constructed by...	103
American Marine Insurance Syndicates, creation and duties.....	43-47

	Page.
American Society for Testing Materials, report.....	23
American Steamship Owners' Mutual Protection and Indemnity Association, cargo claims, settlement, authority granted.....	20, 146
Americans, personnel of crews shall be, when possible.....	153-154
Amphion (formerly called Kohn), steamer, reconditioning, etc.....	127
Antigone (formerly called Nackar), steamer, history.....	127
Appraisals, function of division of supply and sales.....	174
Appropriations:	
Authorizations and, construction division, table.....	109
Expenditures and, Fleet Corporation.....	181-182
Statement, Appendix, Part IV, Schedules 8 and 9.	
Artemis (formerly called Bohemia), steamer, repairs.....	127
Articles of crews, expiration while vessels are in European waters.....	16
Assignment of vessels. <i>See</i> Allocation and assignment of vessels.	
Assignment section. <i>See</i> Allocation and assignment section.	
Assistant treasurer, office of, duties.....	183
Attorney General:	
Duty to conduct the litigation of Fleet Corporation.....	179
Vessels of United States arrested in foreign ports.....	27
Austria:	
Ex-Austrian vessels—	
Data on, Appendix, Part II, Table XXV.	
Disposal.....	31-32
Martha Washington.....	129
Settlement of questions, problem of admiralty division.....	25
Status, table.....	32-33
Balance sheets of United States Shipping Board and United States Shipping Board Emergency Fleet Corporation, Appendix, Part IV, Exhibit A.	
Barbarossa, steamer. <i>See</i> Mercury (formerly called Barbarossa), steamer.	
Barges, operation.....	149
Bayles shipyard, Port Jefferson, sale.....	85
Benson, W. S.:	
Chairman of Board, mentioned.....	13
President of Fleet Corporation, mentioned.....	77
Bentley, A., & Son, Jacksonville, Fla., yard, transfer to city of Jacksonville.....	87
Bethlehem Shipbuilding Corporation:	
Alameda, Calif., ways, etc., sale of Corporation's interest.....	85
Sparrows Point, Md., plant, sale.....	85
Billborough, A., & Co., cargo claims, settlement.....	20
Bills of lading, standardization of form.....	29
Black Arrow (formerly called Rhaetia), steamer, reconditioning.....	128
Board of Engineers for Rivers and Harbors, War Department, port facilities commission merged with.....	66
Bohemia, steamer. <i>See</i> Artemis (formerly called Bohemia), steamer.	
Bonds, managers and operators.....	165
Bristol, Pa.:	
Merchants Shipbuilding Co., status of ship program.....	104
Submarine Boat Corporation yard, disposal of.....	84
Brookdale, wooden training ship, operation.....	37
Bulgaria, steamer. <i>See</i> Philippines (formerly called Bulgaria), steamer.	

	Page.
Bunker section, operating department, duties, etc.....	154-156
Bunkering of vessels:	
Bunker section, duties.....	154-156
Cost of bunkers, reduction .....	14
Fuel situation.....	154-156
Operating department, European organization, work of.....	15
Schedules .....	155-156
Stations—	
Establishment, list of places.....	173
Operation, transfer to supply and sales division.....	171
Bureau of Investigation, Department of Justice, coordination with de- partment of investigation.....	180
Cafeterias, construction of, Appendix, Part II, Table XVIII.	
Calloa (formerly called Sierra Cordova), steamer:	
Not yet returned to Peru.....	32
Reconditioning, etc .....	128
Camp Stuart, Va., training station.....	37
Cancellation of contracts. <i>See</i> Construction of vessels.	
Cancellation section, Supply and Sales Division, placed under Construc- tion Claims Board.....	176
Cancellations, claims and contracts board. <i>See</i> Construction claims board.	
Cargo vessels:	
Hog Island type satisfactory.....	148
Steel, employment of, in foreign trade, Appendix, Part III, Table II.	
Cargoes:	
Berths .....	140-141
Cargo services—	
Combination freight and passenger.....	144
Routes established .....	54-57
Claims, settlement.....	146
Movements, work of traffic department.....	17
Vessels entering and clearing United States ports with, Appendix, Part III, Table I.	
Carolina Shipbuilding Corporation, Wilmington, N. C., sale.....	85
Carriers' conferences and contracts.....	62
Celestial, Chinese vessel, delivery.....	101
Central America, lines to.....	143
Chairman of Shipping Board:	
Appointment—	
Method of .....	13
Of W. S. Benson, mentioned.....	13
Resignation of John Barton Payne, mentioned.....	13
Charter-purchase plan. <i>See</i> Sale of vessels.	
Chartering of vessels:	
Charters—	
Alterations to charter parties governing Mediterranean ore....	17
Coal form.....	164
Standardization of charter parties.....	29
Time form requisition.....	163-164
Supervision, duty of Shipping Board.....	14
China, ship contracts with United States.....	100

	Page.
Claims:	
Cancellation work of construction claims board.....	174-178
Ex-German vessels.....	31-32
Seamen's.....	166
Settlement—	
Claims division.....	146
Legal department, European organization.....	20
Time-form requisition charter, savings.....	163-164
Claims division, traffic department.....	146
Classification and rating of vessels:	
Maintenance by United States Bureau of Survey.....	125
Report of committee on.....	23
Status.....	99
Coal:	
Bunkering supply—	
Work of operating department, European organization.....	15
Work of operating department in America.....	151-162
Coal form charter.....	164
Trade, type of vessels used.....	151
Coastwise laws, extension of.....	66
Coastwise trade, wooden vessels.....	151
Coastwise vessels, Railroad Administration.....	25
Colby, Bainbridge, resignation as commissioner, mentioned.....	13
Collection Bureau, Treasurer's Department.....	183
Collisions, claims, settlement.....	40
Columbia River Shipbuilding Corporation, Portland, Oreg., yard sale of salvageable portion.....	85
Commandeering of vessels. <i>See</i> Requisition of vessels.	
Commerce Department, Secretary, to refuse entry into a United States port if deferred rebates are granted.....	66
Commercial documents, standardization of form.....	29
Commissioners of Shipping Board:	
Appointment—	
List.....	13
Method.....	13
Number increased to 7.....	10
Committee on classification and rating of vessels, recommendations.....	23
Commodities, cost of operation of vessels in given trade with given commodities.....	162
Common law division, law department.....	24
Communications department, European organization, work of.....	21
Compensation:	
Employees of Shipping Board, Appendix, Part I, Table 1.	
Salvage services.....	30
Vessels requisitioned or commandeered, law department to advise.....	24-25
Comptroller, General. <i>See</i> General Comptroller.	
Conditions on board Shipping Board vessels.....	152-153
Construction and Repair Department. <i>See</i> Repair department (formerly called Construction and Repair Department).	
Construction and Repair Department, European organization:	
Functions.....	17
Ports where representatives are located, list.....	17
Repairs, savings effected.....	17-18
Construction and Repairs, Division of. <i>See</i> Division of Construction and Repairs.	

	Page.
Construction Claims Board:	
Claims settled and pending, number.....	177-178
History, functions, etc.....	173-178
Name changed from general cancellations, claims, and contracts board.....	79
Removal to the jurisdiction of the chairman.....	79, 113
Construction department, Division of Construction and Repairs, activities fiscal year 1921.....	79-114
Construction Division:	
Consolidation with the Construction and Repair Department.....	77, 113
Departments removed from its jurisdiction—	
Construction Claims Board.....	79, 113
Financial section.....	79
General cancellations, claims, and contracts board.....	79
Legal Division.....	79
Supply and Sales Division.....	79-113
Investigation work.....	180
Personnel, reduction.....	81
Construction Division, General Comptroller's Department, report.....	181
Construction of cafeterias, Appendix, Part II, Table XVIII.	
Construction of dormitories, Appendix, Part II, Table XVIII.	
Construction of housing projects, Schedule, Appendix, Part II, Table XIX.	
Construction of dry docks:	
Claims, settlement, work of construction claims board.....	176-178
Status.....	89
Construction of marine railways, status.....	88
Construction of vessels:	
Cancellation of contracts—	
By States, Appendix, Part II, Table XVI.	
By type of ship and districts, Appendix, Part II, Table XV.	
Construction claims board.....	173-178
Legal division, work of liquidating liabilities.....	178
Policy of Shipping Board.....	14
Shipyards materials.....	171
Wooden.....	99
Design, work of repair department.....	117-118
Expenditures, summary of, Appendix, Part IV, Schedule 5.	
Function of Division of Construction and Repairs.....	14
Japanese and Chinese contracts.....	100
Keels, laying of, Appendix, Part II, Table IV.	
Launching of, Appendix, Part II, Table V.	
Production—	
Activities for fiscal year 1920.....	9
Cancellations.....	95, 97
Deliveries by district.....	97
Deliveries contemplated to complete the program.....	95
Deliveries per month, table.....	92
Growth, 1815 to 1820, chart.....	80
Percentage of completion.....	94
Record.....	77-82
Reduction in program.....	95
Shipbuilding in United States since 1900, table.....	92
Yards which have completed contracts.....	95
Wooden ships, program.....	98

Construction of vessels—Continued.	Page.
Program—	
Accumulated, by geographical sections of the United States, Appendix, Part II, Table XII.	
Accumulated (including construction in foreign yards), Appendix, Part II, Table XI.	
Active, by class of construction, Appendix, Part II, Table X.	
Active, by type of ship, Appendix, Part II, Table IX.	
By class, table.....	93
By type, table.....	94
Deliveries, Appendix, Part II, Tables VI, VII, VIII.	
Disbursements, fiscal year 1920.....	82
Status.....	82
Safe joint commission should be established to deal with.....	23
Shipyards having completed contracts, Appendix, Part II, Table XIV.	
Status of contracts for passenger vessels, Appendix, Part II, Table XVII.	
Consular Service. <i>See</i> Diplomatic and Consular Service.	
Contract bureau, functions, etc.....	163-166
Contracts:	
Cancellations—	
By States, Appendix, Part II, Table XVI.	
By type of ship and districts, Appendix, Part II, Table XV.	
Dry dock, Appendix, Part II, Table III.	
For transportation facilities, Appendix, Part II, Table XXV.	
Formal contracts.....	121
Lump-sum contracts.....	121
Marine railway, Appendix, Part II, Table III.	
Shipyards, completed contracts, Appendix, Part II, Table XIV.	
Time and material.....	121
Conversion of vessels, oil-tank installation.....	122
Cornwells, Pa., Traylor Shipbuilding Corporation, sale of yard.....	86
Crews:	
Americans only when possible.....	153-154
Behavior in foreign ports, investigation by operating department.....	16
Claims for personal injury, etc.....	166
Treatment.....	152-154
Daily Bulletin, vessel distress section.....	160
Daily Shipping Bulletin, Navy Department.....	161
Danish vessels. <i>See</i> Denmark.	
Deferred-payment plan. <i>See</i> Sale of vessels.	
De Kalb (formerly called Prinz Eitel Frederick), steamer, reconditioning, etc.....	128
Deliveries of vessels:	
Estimated, to complete program, Appendix, Part II, Table XIII.	
For the years 1917, 1918, and 1919.....	78
Statistical summary, Appendix, Part II, Tables VI, VII, VIII.	
Demurrage:	
Adjustment.....	163
Claims, work of traffic department.....	17
Off hire and savings section, functions, etc.....	163-164
Denmark, vessels requisitioned, settlement, function of law department to advise Board.....	25

	Page.
Department of Investigation (formerly called plant-protection section):	
Functions, etc.....	179-180
Removal to the jurisdiction of the chairman.....	113
Department of Justice, litigation for the Shipping Board.....	25, 26
Diesel engines:	
Installation in cargo vessel William Penn.....	101
Operation, training of men for.....	37
Diplomatic and Consular Service, assistance rendered to Shipping Board.....	16
Disbursing department, European organization.....	22
Disbursing officers:	
Miscellaneous disbursements, Appendix, Part IV, Schedule 13.	
Miscellaneous receipts, Appendix, Part IV, Schedule 10.	
Discipline of crews, laxness, policy of operating department to investigate.....	16
District boards, cancellation claims, settlement of.....	175-176
Division of Construction and Repairs:	
Functions, etc.....	77-134
Miscellaneous cash disbursements, Appendix, Part IV, Schedule 14.	
Miscellaneous cash receipts, statement of, Appendix, Part IV, Schedule 11.	
Organization chart.....	115
Division of Industrial Relations:	
Functions, etc.....	68
Removal to the jurisdiction of the chairman.....	113
Ship Construction and Repair, labor problems.....	70
Division of Insurance:	
Cooperation with vessel distress section.....	160
Functions, etc.....	40
Seamen's claims referred to.....	166
Survey of injured ships.....	119
Division of Operations:	
Cash disbursements, summary of, Appendix Part IV, Schedule 15.	
Cash receipts, summary of, Appendix, Part IV, Schedule 12.	
Financial operations.....	167
Investigation work.....	180
Organization, reduction to peace-time basis.....	167
Rate functions.....	61
Report for fiscal year.....	137-167
Division of Passenger Transportation and Housing. <i>See</i> Division of Transportation and Housing Operations (formerly called Division of Passenger Transportation and Housing).	
Division of Regulation:	
Carriers' conferences and contracts.....	62
Deferred rebates.....	63
Formal docket.....	63
History.....	61-65
Informal docket.....	63
Rate functions.....	61
Tariffs.....	64
Division of Supply and Sales:	
Activities.....	171-173
Establishment as separate division.....	79
Functions.....	83

	Page.
Division of Supply and Sales—Continued.	
Plant-disposal section transferred to.....	84
Removal to the jurisdiction of the chairman.....	113
Supply section, operating department united with.....	171
Division of Transportation and Housing Operations (formerly called Division of Passenger Transportation and Housing) :	
Résumé of work.....	106
Transportation facilities, work.....	106
Documents. <i>See</i> Commercial documents.	
Donald, John A. :	
Commissioner of Board, mentioned.....	13
Vice president and trustee of Fleet Corporation, mentioned.....	77
Dormitories, construction of, Appendix, Part II, Table XVIII.	
Dry docks :	
Contracts—	
Claims, settlement, construction claims board.....	174
Statement of, Appendix, Part II, Table III.	
Floating—	
Construction, status.....	89
Contracts, claims, settlement.....	174
Graving, Norfolk Navy Yard.....	90
Managing agents' responsibility.....	125
Status.....	81
Dutch vessels. <i>See</i> Holland.	
Eastern Sword, vessel, last Japanese ship under construction.....	100
Eclipse, steamship, installation of electric-driven engine.....	
Employees, compensation of Shipping Board employees, Appendix, Part I, Table I.	
Enemy vessels. <i>See</i> Austria—Germany.	
Engineering :	
Officers, licenses for.....	151-152
Schools for.....	35, 152
Engineers for Rivers and Harbors, Board of. <i>See</i> Board of Engineers for Rivers and Harbors.	
Engines. <i>See</i> Diesel engines.	
Eten (formerly called Rhakotis), steamer :	
History.....	128
Not yet returned to Peru.....	32
European organization. <i>See</i> United States Shipping Board.	
Ex-Austrian vessels. <i>See</i> Austria.	
Ex-Enemy vessels. <i>See</i> Austria—Germany.	
Ex-German vessels. <i>See</i> Germany.	
Expenditures, Fleet Corporation :	
Housing projects, details of, Appendix, Part II, Table XXIII.	
Passenger transportation, security held for, Appendix, Part II, Table XXIV.	
Statement, Appendix, Part IV, Schedule 5.	
Table.....	181-182
Exports, trade, table.....	139
Fabricated vessels, utility of.....	104
Fees, method of charging by the various registers.....	23
Finance, activities, Division of Operations.....	167



	Page.
Finance division, Construction Division:	
Removal to Washington.....	180
Transferred to general comptroller's office.....	79, 109
Fire-protection branch, department of investigation.....	179
Floating docks:	
Contracts, claims, settlement construction claims board.....	174
Dry docks, construction, status.....	89
Foreign agencies:	
Establishment—	
Duty of Shipping Board.....	14
Résumé and functions.....	57-59
Special service section.....	162
Tables showing.....	162
List.....	58-59
Foreign trade. <i>See</i> Trade.	
Formal contracts. <i>See</i> Contracts.	
Frederick der Grosse, steamer. <i>See</i> Huron (formerly called Frederick der Grosse), steamer.	
Freeboard fixing, American Bureau of Shipping.....	23
Freedom (formerly called Wittekind), steamer, repairs.....	128
Freight rates, deferred rebates.....	63
Freight services. <i>See</i> Cargoes.	
Fuel section, division of supply and sales, cooperation with bunker section.....	155
Fuel situation.....	154-156
Funds, cash and general funds, statement of, Appendix, Part IV, Schedule I.	
General cancellations, claims and contracts board. <i>See</i> Construction claims board.	
General Comptroller:	
Duties.....	180
European organization, functions.....	21-22
Report.....	180-182
General service section, contract bureau, duties.....	165
George Washington, steamer, reconditioning.....	129
Germany:	
Ex-German vessels—	
Claims of other than enemy citizens.....	31-32
Data on, Appendix, Part II, Table XXVI.	
Disposal of.....	31-34
Navy Department, those under control of.....	33
Reconditioning.....	125-131
Repair work done in New York City.....	134
Sale, table.....	33-34
Settlement of questions, problem of admiralty division.....	25
Status, table.....	32-33
Sunk, table.....	34
Gillen, Martin J., trustee of Fleet Corporation, mentioned.....	77
Goliath, tug, assistance to disabled vessels.....	17
Graving docks. <i>See</i> Dry docks.	
Great Lakes, transportation for crews to original point at which articles were signed.....	166

	Page.
Grosser Kurfurst, steamer. <i>See</i> Aeolus (formerly called Grosser Kurfurst), steamer.	
Hague, R. L., appointment as director of the Division of Construction and Repairs .....	77
Hamburg, steamer. <i>See</i> New Rochelle (ex-Powhatan, ex-Hamburg), steamer.	
Hampton, Va., Tenny, C. H., & Co., yard, sale.....	86
Hampton Shipbuilding & Dry Dock Co., purchase of Tenny yard.....	86
Hog Island:	
Status of shipbuilding program.....	103
Shipyard, disposal of.....	84
Holland, redelivery of Dutch vessels.....	165
Hollywood, training ship, use.....	37
Housing Division, General Comptroller's Department, function.....	181
Housing projects:	
Commitments, statement of, total, Appendix, Part II, Table XXII.	
Expenditures—	
Details of, Appendix, Part II, Table XXIII.	
Statement of, Appendix, Part IV, Schedule 7.	
Facilities furnished by municipalities, Appendix, Part II, Table XXI.	
Loans for, Appendix, Part II, Table XX.	
Men housed, Appendix, Part II, Table XIX.	
Present status.....	81
Schedule, Appendix, Part II, Table XIX.	
Work of division of transportation and housing operations.....	106
Huebner, S. S., marine insurance.....	24
Hurley, Edward N., chairman of Shipping Board, resignation.....	13
Huron (formerly called Frederick der Grosse), steamer, reconditioning..	129
Imports, trade, table.....	139
Industrial relations, division of. <i>See</i> Division of Industrial Relations.	
Inspection of vessels:	
Procedure.....	119
Work of Construction and Repair Department.....	118-120
Insurance. <i>See</i> Marine, insurance.	
Insurance Division. <i>See</i> Division of Insurance.	
Intelligence department, European organization, work.....	20
Inventory section, contract bureau, functions.....	164
Investigation, Bureau of. <i>See</i> Bureau of Investigation, Department of Justice.	
Investigation, Department of. <i>See</i> Department of Investigation.	
Investigations conducted by Shipping Board:	
Section 12 of the shipping act—	
Classification and rating of vessels.....	22-24
Marine insurance.....	24
Navigation laws.....	24
Investments, statement of Appendix, Part IV, Schedule 3.	
Iris, training ship.....	87
Jacksonville, Fla., Bentley, A., & Son, yard, transfer to.....	87
Japan, ship contracts with United States.....	100
Just compensation. <i>See</i> Compensation.	
Justice, Department of. <i>See</i> Department of Justice.	
Kaiser Wilhelm, 2d, steamer. <i>See</i> Agamemnon (formerly called Kaiser Wilhelm, 2d), steamer.	
Keels, laying of, Appendix, Part II, Table IV.	

	Page.
Koenig Wilhelm, 2d, steamer. <i>See</i> Madawaska (formerly called Koenig Wilhelm), steamer.	
Kolm, steamer. <i>See</i> Amphion (formerly called Kolm), steamer.	
Kron Prinz Wilhelm, steamer. <i>See</i> Von Steuben (formerly Kron Prinz Wilhelm) steamer.	
Kron Prinzessin Cecilie, steamer. <i>See</i> Mount Vernon (formerly called Kron Prinzessin Cecilie), steamer.	
Labor problems:	
Longshore.....	70
Marine.....	69.
Policy of Shipping Board.....	68-72.
Ship construction and repair.....	70
Work of Division of Industrial Relations.....	68-70.
Lading, bills of. <i>See</i> Bills of lading.	
Lake Monroe, steamer, libel case, decision of the Supreme Court.....	27.
Lakes. <i>See</i> Great Lakes.	
Launching of vessels, Appendix, Part II, Table V.	
Law department, Shipping Board:	
Functions.....	24.
Sale of ships, legal problems.....	73-74.
Leetsdale, Pa., steel fabricating plant, McClintic-Marshall Co., sale.....	85.
Legal Department, European organization, divisions.....	20.
Legal Division, Emergency Fleet Corporation:	
Cancellation of contract, liquidating liabilities.....	180.
Transferred to the office of general counsel, Washington.....	79.
Legislation:	
Affecting the Shipping Board Appendix, Part I, Table II.	
Proposed, advice given by law department.....	24.
Leviathan (formerly called Vaterland), steamer, reconditioning, etc....	129.
Ley, Fred T. & Co. (Inc.), Mobile, Ala., concrete yard, sale.....	87.
Liberty Glo, steamship, standard parts for.....	105.
Liberty Shipbuilding Co., Wilmington, N. C., concrete yard, sale.....	86.
Licenses, navigation and engineering officers.....	151-152.
Liens. <i>See</i> Mortgages.	
Liner services:	
Assignments of suitable vessels.....	148-149.
Steel vessels in berth liner service, Table IV.....	47, 50-51.
Litigation:	
Board given authority to employ attorneys to represent it in court...	26.
Fleet Corporation attorneys to act in conjunction with United States district attorneys.....	179.
Lloyds' Register of Shipping, classification of American vessels, status...	99.
Loading of vessels:	
Load lines, fixing, American Bureau of Shipping.....	23.
Work of supervisors' department.....	150.
Loans:	
By Fleet Corporation housing projects, Appendix, Part II, Table XX.	
Mortgage loans on vessel property, investigation.....	24.
Longshore labor, conditions fiscal year.....	69.
Losses of Shipping Board vessels, table.....	41.
Lump-sum contracts. <i>See</i> Contracts.	
McClintic-Marshall Co., steel fabricating plants, sale.....	85.
Macy board. <i>See</i> Shipbuilding labor adjustment board.	

	Page.
Madawaska (formerly called Koenig Wilhelm, 2d), steamer, history-----	129
Managers and operators:	
Accounts, work of general comptroller's department.....	180
Bonding of.....	165
Repairs of vessels, responsibility for.....	123
Managing and operating agreements:	
Interpretation, function of general service section.....	165
New form—	
Number of steel steamers delivered.....	164-165
Repairs to vessels.....	123
Marine and dock industrial relations, division of. <i>See</i> Division of Industrial Relations.	
Marine department, cooperation with supervisors' section.....	159
Marine insurance:	
Cargo claims.....	147
Investigation—	
Mentioned.....	24
Report, résumé.....	41-43
Legislative disabilities.....	46-47
Losses of Shipping Board vessels, table.....	41
Premium rates.....	40
Résumé.....	40
Syndicates A, B, and C.....	43-47
Vessels sold on partial payment plan.....	40
Marine labor, conditions, etc.....	68
Marine railways:	
Contracts, Appendix, Part II, Table III.	
Contracts, claims, settlement construction claims board.....	174
Status.....	81-88
Maritime laws. <i>See</i> Mortgages.	
Mark, steamer. <i>See</i> Suwanee (formerly called Mark), steamer.	
Martha Washington, ex-Austrian steamer:	
Disposition of.....	31
Reconditioning, etc.....	129
Maryland Shipbuilding Co., Sollers Point, Md., wooden-ship yard, sale....	86
Materials. <i>See</i> Supplies.	
Merchant marine, changes in United States seagoing merchant marine, Table I.....	47, 48
Merchants' marine act, 1920:	
Section 3—	
Attorneys to represent Board in court.....	26
Membership of Shipping Board.....	10
Reorganization of the Board.....	10
Section 7—	
Foreign trade.....	51
Section 8—	
Ports, promotion and development.....	67
Section 18—	
Transfer of registry.....	34
Section 19—	
Regulatory powers conferred, outline.....	65
Section 20—	
Deferred rebates.....	63

	Page.
Merchants' marine act, 1920—Continued.	
Section 25—	
Classification and rating of vessels.....	24
Section 30—	
Mortgages, changes in law.....	27
Recommendations embodied.....	24
Merchants' Shipbuilding Co., Bristol, Pa., status of ship program.....	104
Mercury (formerly called Barbarossa), steamer, history.....	129
Metals, testing those used in ship construction.....	23
Military Intelligence Section, coordination with department of investigation.....	180
Mobile, Ala., Ley Fred T., & Co., concrete yard, sale.....	87
Moccasin, steamer. <i>See</i> Porto Rico, ex-Moccasin, ex-Prinz Joachim, steamer.	
Mortgages:	
Loans on vessel-property investigation.....	24
Ship-mortgage act, 1920.....	27
Mount Vernon (formerly called Kron Prinzessin Cecilie), steamer, history.....	130
Municipalities, list of furnishing housing facilities, Appendix, Part II, Table XXI.	
Nackar, steamer. <i>See</i> Antigone (formerly called Nackar), steamer.	
Nansemond (formerly called Pennsylvania), steamer, reconditioning, etc.....	130
National adjustment commission, longshore labor.....	69
National Shipbuilding & Dry Dock Co., Savannah, Ga.....	86
Naval Intelligence, Office of. <i>See</i> Office of Naval Intelligence.	
Navigation:	
Officers, licenses.....	151-152
Schools.....	35, 152
Navigation laws:	
Codification.....	24-28
Report.....	24
Navigation laws revision committee:	
Codification of navigation laws.....	29
Report.....	24
Navy Department:	
Ex-German vessels, table showing those under control of.....	33
Hog Island ships for.....	103
Quantico Shipyard, transfer.....	86
Radio work for Shipping Board.....	156-157
Requisitioned vessels allocated to.....	30
San Diego concrete yard transferred to.....	87
Use by Shipping Board of navy yards for repairs.....	122-123
Navy yards, use for repairs of vessels.....	122-123
New Rochelle (ex-Powhatan, ex-Hamburg), steamer, reconditioning, etc.....	130
Newark, N. J., Submarine Boat Corporation, yard, disposal of.....	84
Norfolk Navy Yard, graving docks.....	90
Norway, vessels requisitioned—settlement, function of law department to advise Board.....	25
Off hire, collection, etc.....	163
Office of Naval Intelligence, coordination with department of investigation.....	180

	Page.
Officers:	
Engineering, licenses.....	151-152
Navigation, licenses.....	151-152
Oil:	
Fuel—	
Bunkering stations, operation.....	171
Deep-tank installation.....	122
Supply abroad.....	16, 154-155
Supply for vessels.....	154-155
Operating department, functions, etc.....	151-156
Operating department, European organization, functions.....	15
Operating division, General Comptroller's Department; duties, etc.....	181
Operation of vessels:	
Cost, etc., determination.....	167
Expenses, revenues from, Appendix, Part IV, Exhibit B.	
Function of division of operations.....	14
Résumé of year's work.....	10
Operations, division of. <i>See</i> Division of Operation.	
Operators. <i>See</i> Managers and operators.	
Otsego (formerly called Prinz Eitel Frederich), steamer, reconditioning, etc.....	130
Partial-payment plan. <i>See</i> Sale of vessels.	
Passenger services:	
Combination freight and passenger.....	144
Establishment.....	56-57
Passenger Transportation and Housing, Division of. <i>See</i> Division of Transportation and Housing.	
Passenger vessels:	
Accommodations, etc.....	101
Status of contracts, Appendix, Part II, Table XVII.	
Payne, John Barton:	
Chairman of Shipping Board, resignation.	
Trustee of Fleet Corporation, mentioned.....	77
Pennsylvania, steamer. <i>See</i> Nansemond (formerly called Pennsylvania), steamer.	
Personal injury, claims of seamen.....	166
Peru:	
Board to purchase two Peruvian steamers.....	164
Enemy tonnage secured from.....	32
Philippines (formerly called Bulgaria), steamer, reconditioning, etc.....	130
Pisco, steamer, subcharter to British then to French.....	32
Plant-disposal section, transferred to the division of supply and sales.....	84
Plant-guarding branch, department of investigation, history.....	179
Plant inventories.....	172
Plant-protection section. <i>See</i> Department of investigation (formerly called plant-protection section).	
Plants. <i>See</i> Shipyard plants.	
Pocahontas (formerly called Princess Irene), steamer, history.....	130
Policies of Shipping Board:	
Labor problems.....	68-72
Letter of transmittal.....	9
Ship supplies, purchase.....	173
Transfer of registry.....	34

Port facilities:	
Development—	Page.
Duty of Shipping Board.....	14
Investigation by port facilities commission.....	66
Port facilities commission, activities of.....	66
Port Jefferson, N. Y., Bayles shipyard, sale.....	85
Portland, Oreg., Columbia River Shipbuilding Corporation, removal of salvage.....	85
Porto Rico, ex-Moccasin, ex-Prinz Joachim, steamer, reconditioning, etc..	130
Ports, promotion and development.....	67
Pottstown, Pa., steel fabricating plant, McClintic-Marshall Co.....	85
Powhatan, steamer. <i>See</i> New Rochelle (ex-Powhatan, ex-Hamburg), steamer.	
Portsmouth, N. H., Shattuck, L. H. (Inc.), sale of yard.....	86
Practice. <i>See</i> Rules of practice.	
Premiums on insurance, marine and war-risk rates.....	40
President Grant, steamer, history.....	131
President of Fleet Corporation:	
Benson, W. S., mentioned.....	77
Divisions reporting directly to—	
Construction claims board.....	171
Department of investigation.....	171
General comptroller.....	171
Legal division.....	171
Supply and sales division.....	171
Treasurer.....	171
Princess Alice, steamer. <i>See</i> Princess Matoika (formerly called Princess Alice), steamer.	
Princess Irene, steamer. <i>See</i> Pocahontas (formerly called Princess Irene), steamer.	
Princess Matoika (formerly called Princess Alice), steamer, history.....	131
Prinz Eitel Frederich, steamer. <i>See</i> De Kalb (formerly called Prinz Eitel Frederich), steamer.	
Prinz Eitel Frederich, steamer. <i>See</i> Otsego (formerly called Prinz Eitel Frederick), steamer.	
Prinz Joachim, steamer. <i>See</i> Porto Rico, ex-Moccasin, ex-Prinz Joachim, steamer.	
Public-utility companies, loans to, by Fleet Corporation, Appendix, Part II, Table XX.	
Quantico shipyard, Quantico, Va., transferred to Navy Department.....	86
Radio equipment:	
Information furnished by communications department.....	21
Radio section.....	156-158
Radio section (formerly radio department), establishment.....	156-158
Railroad Administration, coastwise vessels taken over by.....	25
Railways, marine. <i>See</i> Marine railways.	
Rates:	
Division of Regulation—	
Functions of, distinguished from Division of Operations.....	61
Work of.....	61
Freight, deferred rebates.....	63
Insurance.....	40
Preferential rail rates.....	66
Work of rates division.....	145-146

	Page.
Rates division, functions, etc.....	145
Rating of vessels. <i>See</i> Classification and rating of vessels.	
Rebates:	
Deferred—	
Division of Regulation.....	63
Merchant-marine act, 1920, section 20.....	63, 66
Reconditioning of vessels:	
Ex-enemy vessels—	
List.....	126-131
Status.....	125-126
Japanese.....	100-101
Recruiting of officers and men, duty of Shipping Board.....	14
Recruiting Service, functions, etc.....	35
Redelivery of vessels to owners. <i>See</i> Requisition of vessels.	
Registry, transfer of. <i>See</i> Transfer of registry.	
Regulation, Division of. <i>See</i> Division of Regulation.	
Remeasurement of vessels, work of construction and repair department. 131-132	
Repair department (formerly called construction and repair department):	
Cooperation with vessel distress section.....	160
Functions.....	115
Organization.....	133-134
Remeasurement of vessels.....	131-132
Reorganization.....	114-115
Repair of vessels:	
Competition.....	121
Contracts, forms of.....	120
Cost reduction, work of European organization.....	14
Expenditures, control by repair department.....	132-133
Facilities—	
Dry docks, construction.....	89
Marine railways.....	88
Function of Division of Construction and Repair.....	14
Increase in work.....	9
Managing and operating agreement.....	123
Navy yards, use of.....	122-123
Procedure.....	120-121
Repair department.....	114-134
Savings effected abroad.....	17-18
Surveys.....	119
United States Bureau of Survey—	
Contract with.....	124-125
Dry docks.....	125
Steel vessels.....	125
Wooden vessels.....	125
Requisition of vessels:	
Allocation by Shipping Board—	
Navy Department.....	30
War Department.....	30
Assignment to owners for operation.....	148
Just compensation, law department to determine.....	24-25
Redelivery—	
Accounts, settlement.....	164
Table showing.....	164



	Page.
Requisition of vessels—Continued.	
Time form requisition charter.	
Use and redelivery to owners, adjustment, problem of admiralty division .....	25
Vessels under construction—	
Nationality of former owners, table .....	97
Status .....	97
Reviewing section, contract bureau, functions, etc .....	164
Rhaetia, steamer. <i>See</i> Black Arrow (formerly called Rhaetia), steamer.	
Rhakotis, steamer. <i>See</i> Eten (formerly called Rhakotis), steamer.	
Rhein, steamer. <i>See</i> Susquehanna (formerly called Rhein), steamer.	
Richmond boiler plant, Richmond, Va., sale .....	85
Robinson, Henry M., resignation as commissioner .....	13
Rules of practice, adoption .....	61
Sailors. <i>See</i> Crews.	
St. Johns River shipyard, South Jacksonville, Fla., sale .....	86
Salaverry, steamer, subcharter to British, then to French .....	32
Sale of surplus materials, activities of division of supply and sales .....	171
Sale of vessels:	
Ex-Austrian vessels .....	31
Ex-German vessels .....	31
Expenses, revenues from, Appendix, Part IV, Exhibit B.	
General service section, contract bureau .....	165
Law Department to advise Board .....	25
Legal problems .....	73-74
Plans—	
Charter purchase plan .....	72
Deferred payment plan .....	72
Partial payment plan, insurance .....	40
Policy, determined by Shipping Board .....	14
Ship sales as of June 30, 1920, table .....	73
Ship Sales Division .....	72
Salvage material. <i>See</i> Surplus material.	
Salvage of vessels:	
Settlements for services .....	30
Work of the operating department, European organization .....	16
San Diego Concrete Shipbuilding Co., San Diego, Calif., yard transferred to Navy Department .....	87
San Francisco, Calif., training station .....	37
Savannah, Ga., Terry Shipbuilding Corporation, yard, transferred to contractor .....	85
Schooners, preponderance of disability .....	161
Scott, T. A., resignation as commissioner .....	13
Sea service bureau:	
Placements during fiscal year, table .....	38-39
Work of .....	37
Sea training bureau, number of men trained, table .....	37
Seamen's claims section .....	166
Seattle, Wash.:	
Skinner & Eddy Corporation, plant No. 2, sale .....	85
Training station .....	37
Secretarial department, European organization .....	21
Securities of the Corporation, custody of trust department .....	183
Shattuck, L. H. (Inc.), Portsmouth, N. H., yard, sale .....	86

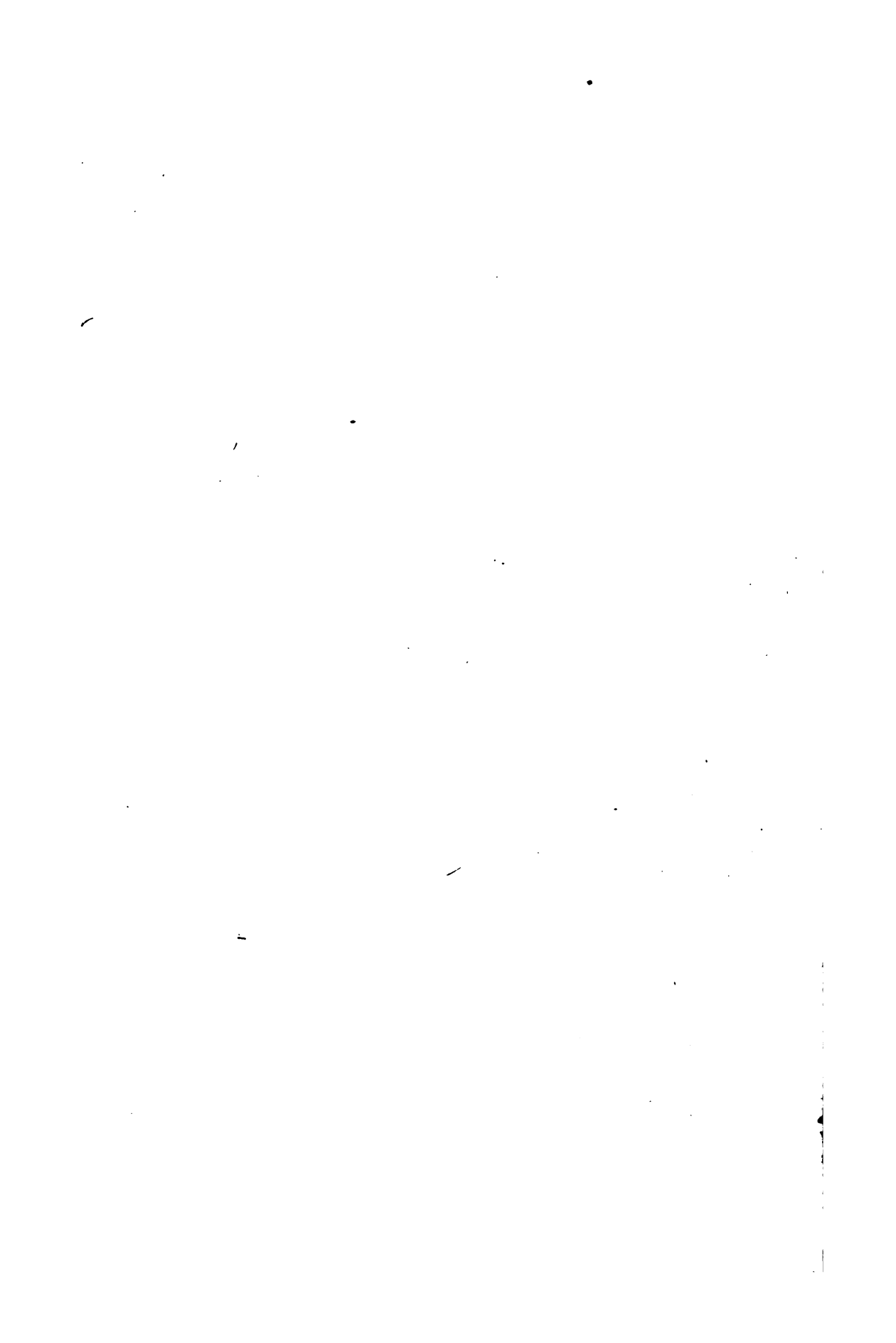
	Page.
Ship mortgage act, 1920.....	27
Ship purchase and ship mortgage forms; law department to advise Board.....	25
Ship sales. <i>See</i> Sale of vessels.	
Ships Sales Division :	
Cooperation of contract bureau.....	165
Functions, etc.....	72
Shipbuilding labor adjustment board, award of October 1, 1918.....	70
Shipping, regulation, duty of Shipping Board.....	13
Shipping act of September 7, 1916:	
Section 12, investigations—	
Classification and rating of vessels.....	22-23
Marine insurance.....	24
Navigation laws.....	24
Section 22—	
Division of Regulation, work.....	61-66
Shipping Board. <i>See</i> United States Shipping Board.	
Ships. <i>See</i> Vessels.	
Shipyards plants:	
Contracts, completed, Appendix, Part II, Table XIV.	
Disposal of, Appendix, Part II, Table II.	
Now building for the Corporation, Appendix, Part II, Table I.	
Transferred to supply and sales division, Appendix, Part II, Table II.	
Shipyards plants division, activities.....	82
Shipyards. <i>See</i> Shipyards plants—Yards.	
Sierra Cordova, steamer. <i>See</i> Calloa (formerly called Sierra Cordova), steamer.	
Skinner & Eddy Corporation, Seattle, Wash., plant No. 2, sale.....	85
South America, lines to.....	143
South Jacksonville, Fla., St. Johns River shipyard, sale.....	86
Sparrows Point, Md., Bethlehem Shipbuilding Corporation, sale of im- provements .....	85
Special commissioner in Europe, appointment.....	14
Special service section.....	162
State Department, Secretary, authority over United States vessels arrested in foreign ports.....	27
Statistical studies:	
Changes in United States seagoing merchant marine, Table I.....	47, 48
Recapitulation of ships controlled by Shipping Board as of June 30, 1919, Table II.....	47, 48, 49
Steel vessels in berth liner service, Table IV.....	47, 50-51
Steamboat Inspection Service, Department of Commerce:	
Licenses for officers of navigation engineering.....	151-152
Requirements should conform with classification societies.....	23
Steel-fabricating plants, Leetsdale and Pottstown, Pa., sale.....	85
Steel vessels:	
In berth liner service, Table IV.....	47, 50-51
Repairs .....	125
<i>See also</i> Vessels.	
Stevens, Raymond B., resignation as commissioner.....	13
Strikes:	
Longshore .....	70
Marine .....	69

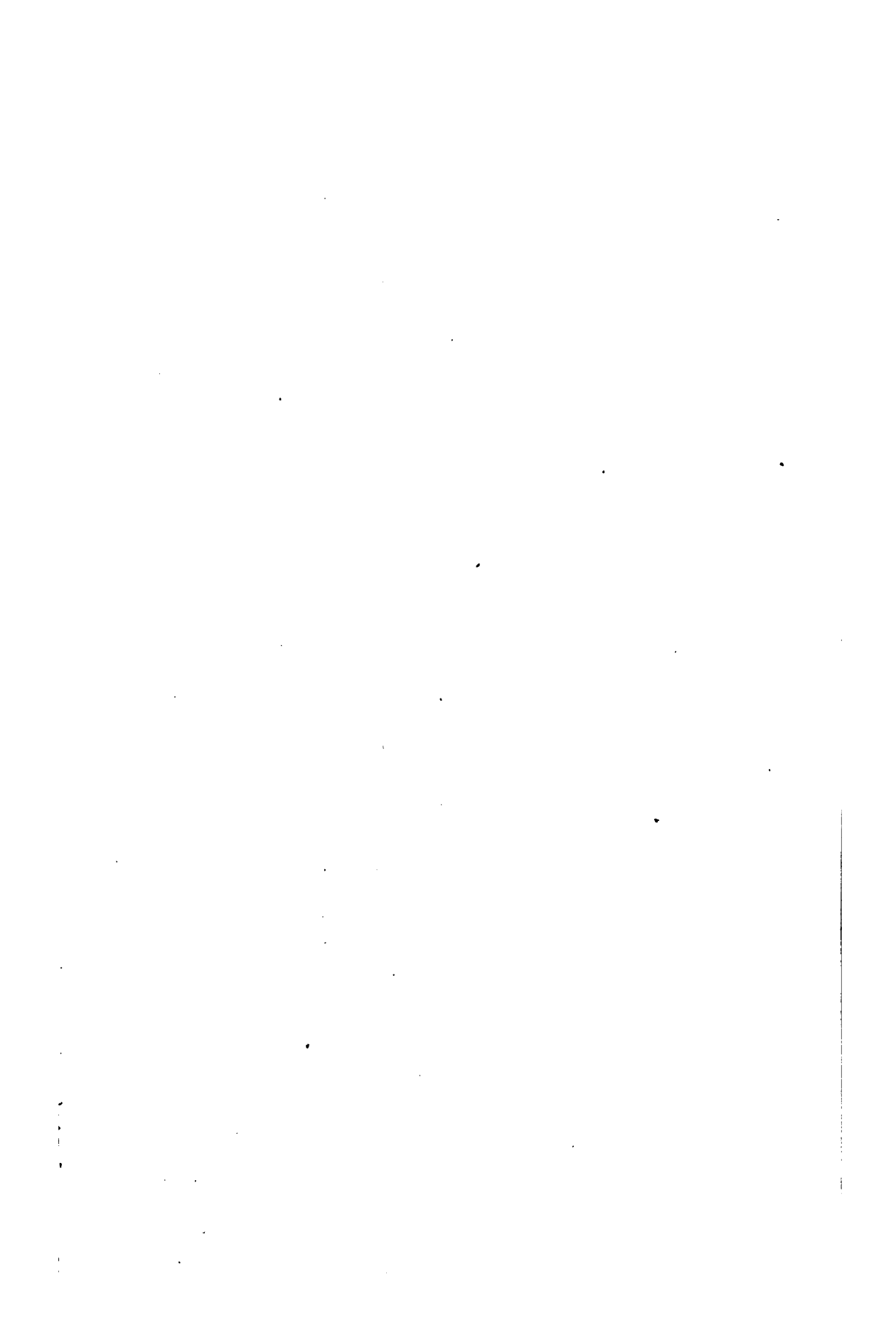
	Page.
<b>Submarine Boat Corporation, Newark, N. J.:</b>	
Ship program .....	105
Yards at Hog Island, Newark Bay, and Bristol, disposal of .....	84
Supercargo section .....	161
Supercargoes, duties, etc .....	161
Supervisors' section .....	158-160
Supplies:	
For plants, statement of, as of June 30, 1920, Appendix, Part IV, Schedules 4 and 6.	
For vessels—	
Contracts for materials, cancellation .....	171
Cost, reduction, work of European organization .....	14
Statement of, as of June 30, 1920, Appendix, Part IV, Schedules 4 and 6.	
Supply and Sales, Division of. <i>See</i> Division of supply and sales.	
Supply department, European organization, economies .....	18-20
Supply section, operating department, union with supply and sales division .....	171
Surplus materials:	
Appraisals, inventories .....	172
Catalogue .....	172
Sale .....	171-172
Survey, United States Bureau of. <i>See</i> United States Bureau of Survey.	
Susquehanna (formerly called Rhein), steamer, reconditioning, etc .....	131
Suwanee (formerly called Mark), steamer, reconditioning, etc .....	131
Tankers:	
Repairs .....	121
Routes covered, etc .....	149
Tariffs:	
Checking, analyzing, etc .....	64
Rates division not to issue .....	145
Tariff circular No. 1 .....	64
Tenny, C. H., & Co., yard, sale .....	86
Terry Shipbuilding Corporation, Portland, Oreg., transferred to contractor .....	85
Time and material contracts. <i>See</i> Contracts.	
Time form requisition charter. <i>See</i> Chartering of vessels.	
Tonnage:	
Assignments, Appendix, Part III, Table VI.	
Employment of—	
March, 1919, to June 30, 1920, Appendix, Part III, Table III.	
Chart .....	143
Report, June, 1920 .....	142
Ships under control of the Board .....	142
Trade:	
Cargo berths .....	140-141
Coal .....	151
Foreign—	
Authority given Shipping Board .....	51
Employment of steel cargo vessels in, Appendix, Part III, Table II.	
Employment of United States merchant marine and tonnage, total amount .....	53

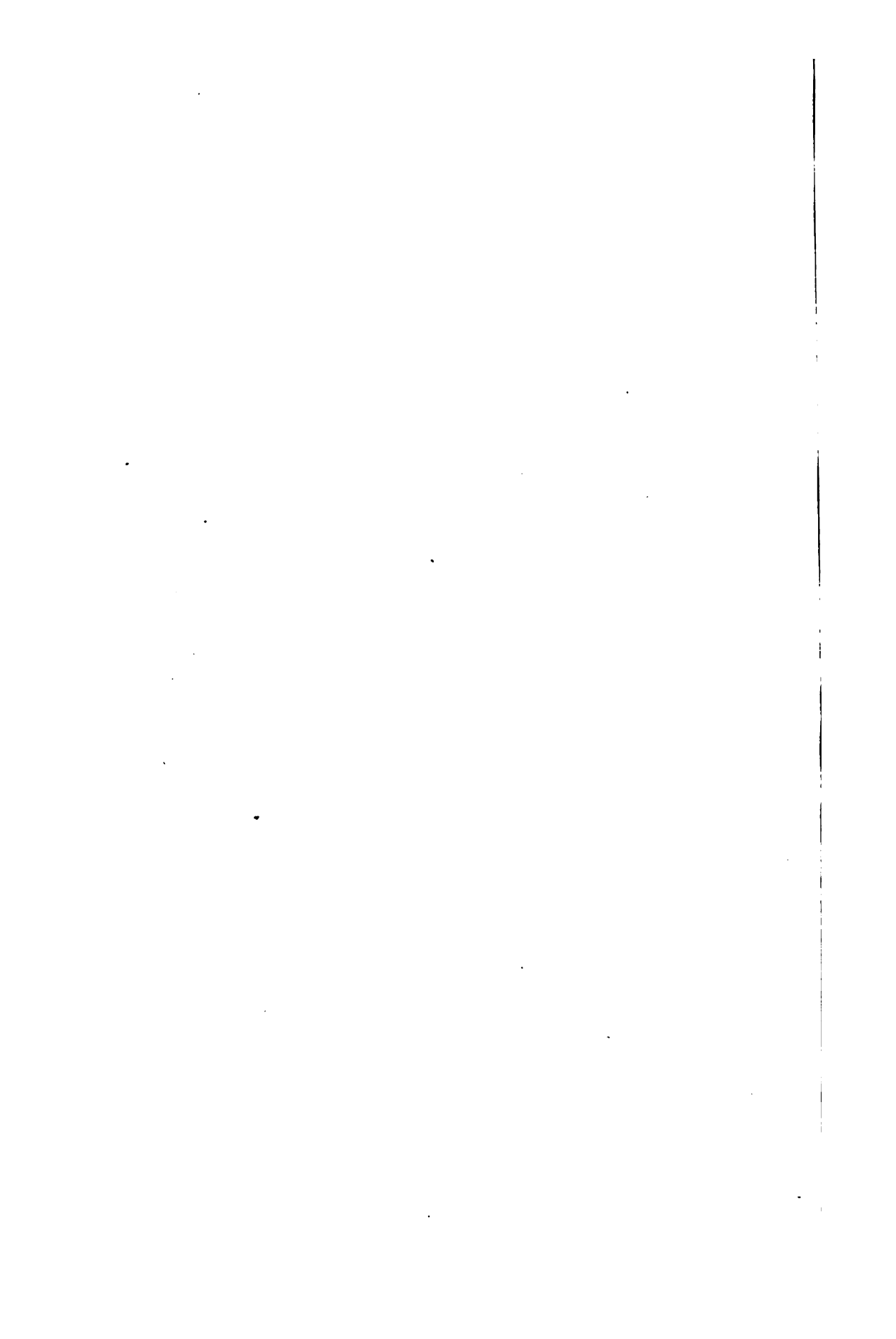
## Trade—Continued.

	Page.
Foreign—Continued.	
Report, January 1, 1920, to June 30, 1920, Appendix, Part III, Table I.	
Schedule covering January-June, 1920.....	137-138
Shipping carried in United States bottoms.....	60
South and Central America routes, Appendix, Part III, Table IV.	
Vessels operating between foreign ports.....	144
Routes—	
Development.....	52-57
Establishment, duty of Shipping Board.....	14
Utility of American ships, table.....	139
Trades section, functions.....	140
Traffic branch, supply and sales division.....	173
Traffic department, Division of Operations, functions.....	140-151
Traffic department, European organization, functions.....	17
Training of men.....	37
Transfer of flag. <i>See</i> Transfer of registry.	
Transfer of registry:	
Advice by law department.....	25
Jurisdiction by Board.....	34
Number, table.....	35
Policy of the Board.....	34
To aliens—supervision, duty of Shipping Board.....	14
Transportation and Housing, Division of. <i>See</i> Division of transportation and housing.	
Transportation facilities:	
Contracts for, Appendix, Part II, Table XXV.	
Expenditures, statements of, Appendix, Part II, Table XXIV and Part IV, Schedule 7.	
Promotion and development.....	67
Résumé of work.....	106
Transportation of crews to point where articles were signed.....	166
Traylor Shipbuilding Corporation, Cornwells, Pa., wooden-ship yard, sale.	86
Treasurer, report.....	183
Treasury audit department, functions.....	183
Trial trips, procedure.....	118-120
Trust department.....	183
Trustees, United States Shipping Board Emergency Fleet Corporation.....	77
Tugs, operation of.....	149
Tugs and barge section, functions.....	149
Turbine training schools.....	36
Turbines, repairs to.....	121
Turn around of vessels, reduction in time.....	14
United States Bureau of Survey:	
Contract with.....	124-125
Steel vessels, repairs.....	125
Wooden vessels, repairs.....	125
United States Shipping Board:	
European organization—	
Operating department.....	15
Résumé.....	14
Turn around of vessels, reduction in time.....	14

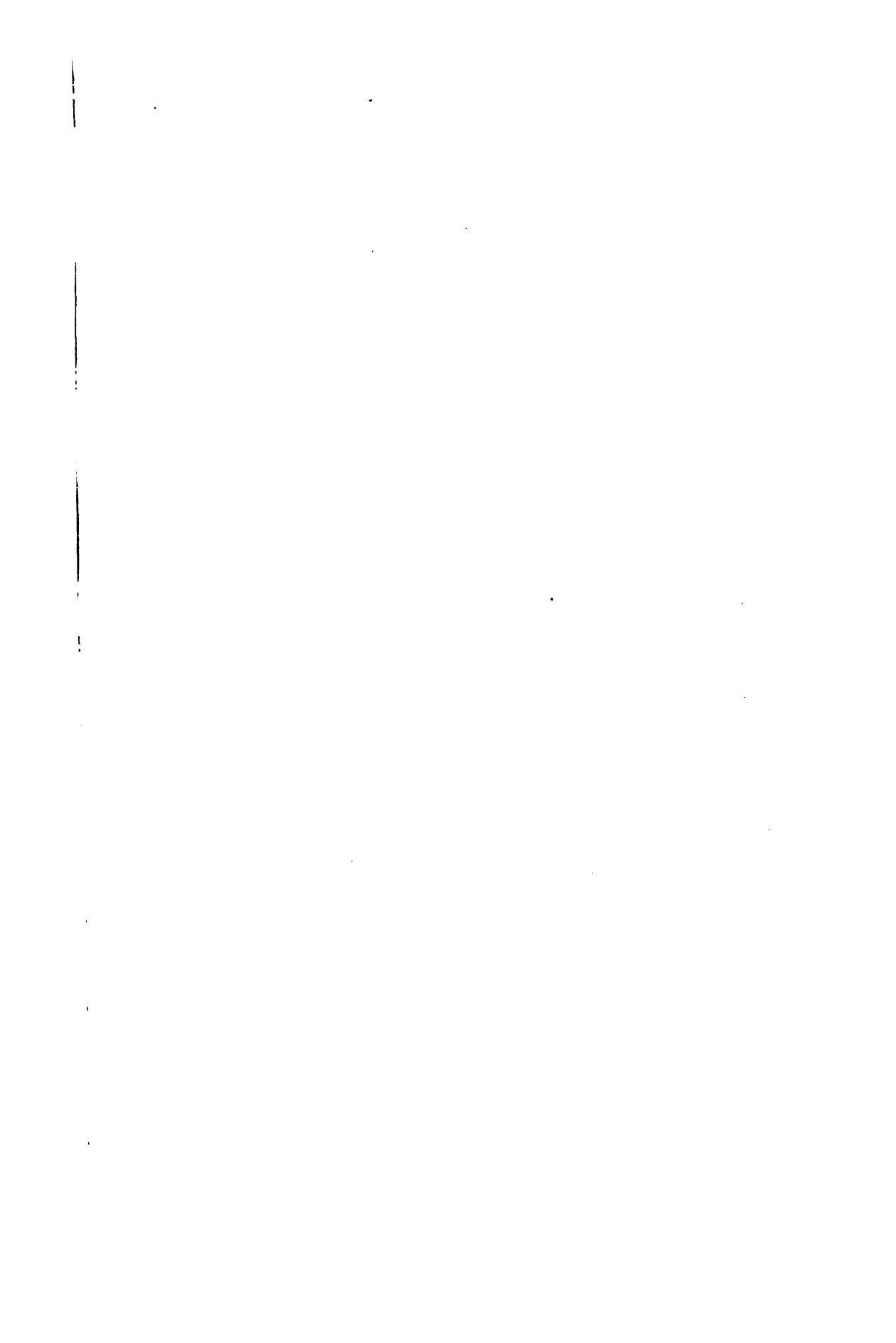
	Page.
United States Shipping Board—Continued.	
Functions .....	14
Members—	
Changes effected by merchant marine act.....	13
Increase under merchant marine act.....	10
Résumé, 1920.....	13
United States Shipping Board Emergency Fleet Corporation:	
Divisions, etc.—list of those removed to the jurisdiction of the chairman.....	113
Trustees as of June 30, 1920.....	77
Uruguay, enemy tonnage secured from.....	32
Value of the Corporation, custody of trust department.....	183
Vessel distress section, functions, etc.....	160-161
Vessels:	
Owned and controlled by the United States Shipping Board as of June 30, 1920.....	140
<i>See also</i> phase of subject involved.	
Vaterland, steamer. <i>See</i> Leviathan (formerly called Vaterland), steamer.	
Von Steuben (formerly Kron Prinz Wilhelm), steamer, reconditioning.....	131
Voyage accountings:	
Submission by operators, work of general comptroller's office.....	180
Work of special service section.....	162
Wages:	
Seamen, claims.....	166
Shipbuilders, policy of Shipping Board.....	71
War Department:	
Hog Island vessels for.....	103
Requisitioned vessels allocated to.....	30
War risk insurance.....	40
Weekly bunker bulletin.....	155
West Indies, coal trade, charter party.....	164
William Penn, cargo vessel, installation of Diesel engines.....	101
Wilmington, N. C.:	
Carolina Shipbuilding Corporation, yard, sale.....	85
Liberty Shipbuilding Co., yard, sale.....	86
Wireless equipment. <i>See</i> Radio equipment.	
Wittekind, steamer. <i>See</i> Freedom (formerly called Wittekind), steamer.	
Wooden vessels:	
Coastwise trade .....	151
Construction program—	
Cancellation, contract of January 27, 1920.....	99
Status .....	98
Operation .....	150
Repairs .....	125
Suitability for certain uses.....	150
Yards:	
Agency—	
American International Shipbuilding Corporation.....	103
Merchants Shipbuilding Co.....	104
Submarine Boat Corporation.....	105
List of those disposed of or to be disposed of.....	84-87
<i>See also</i> Shipyard plants.	











**THIS BOOK IS DUE ON THE LAST DATE  
STAMPED BELOW**

**RENEWED BOOKS ARE SUBJECT TO IMMEDIATE  
RECALL**

**LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS**

**Book Slip—Series 458**

**Nº 830695**

U.S. Shipping Board.  
[First-] Seventeenth  
annual report of the  
United States Shipping  
Board.

HE745  
A3  
v.4  
1919/20

LIBRARY  
UNIVERSITY OF CALIFORNIA  
DAVIS

